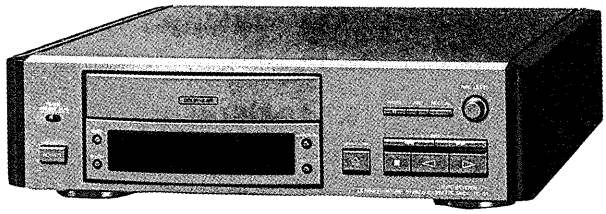
TC-S1

SERVICE MANUAL

AEP Model
UK Model
Singapore Model
Tourist Model



This set is the deck section in SHC-S1/S2.

Model Name Using Similar Mechanism	New
Tape Transport Mechanism Type	TCM-9700HLD

SPECIFICATIONS

Recording system
4-track 2-channel stereo
Fast winding time
Approx. 110 sec. (with Sony C-60 cassette)
Bias
AC bias
Heads
Erasing head × 1 (F&F head)
Recording/playback head × 1 (SD head)

Motors
Capstan motor × 1
Reel motor × 1
Assist (mechanism drive) motor × 1

Signal-to-noise ratio (at peak level and weighted) (Dolby NR off)

Cassette type	S/N ratio
Type IV	58 dB
TYPE II	57 dB
Type I	55 dB

S/N improvement (approximate values)
With Dolby B NR on: 5 dB at 1 kHz; 10 dB at 5 kHz
With Dolby C NR on: 15 dB at 500 Hz; 20 dB at 1 kHz
With Dolby S NR on: 10 dB at 100 Hz; 24 dB at 1 kHz

Harmonic distortion
0.4% (with Type I, 160 nWb / m, 315 Hz, 3rd H.D.)
1.8% (with Type IV, 250 nWb / m, 315 Hz, 3rd H.D.)

Frequency response (Dolby NR off)

Cassette type	Frequency response
Type IV	25 - 19,000 Hz (±3dB, IEC) 25 - 13,000 Hz (±3dB, -4 dB recording)
Type II	25 - 17,000 Hz (±3dB, IEC)
Type I	25 - 16,000 Hz (±3dB, IEC)

Type IV: Sony Type IV (METAL)
Type II: Sony Type II (HIGH)
Type I: Sony Type I (NORMAL)

WOW and flutter
±0.13 % W.Peak (IEC)
0.06 % W.RMS (NAB)
±0.16 % W.PEAK (DIN)

Inputs
LINE IN (phono jacks)
Sensitivity 0.16 V
Input impedance 47 k ohms

—Continued next page—

使用時は添付資料も参照のこと
Refer to the additional documents.

STEREO CASSTTE DECK

SONY®

Outputs

LINE OUT (phono jacks)
Output level 0.5 V (at 47 k ohms)
Load impedance over 10 k ohms

General

Power requirements
220 - 230 V AC, 50/60 Hz (AEP, UK, German, Italian model)
110 - 120 V, 220 - 240 V AC, adjustable, 50/60 Hz (Singapore, Tourist model)
Power consumption
15 W
Dimensions (including projections)
Approx. 310×90×345 mm (12 1/4×3 5/8×13 5/8 inches) (w/h/d)
Mass
Approx. 4.3 kg (9 lb 8 oz)

Supplied accessories

Audio cord
(2)(2 phono plugs - 2 phono plugs)

Design and specifications are subject to change without notice.

SAFETY-RELATED COMPONENT WARNING!!

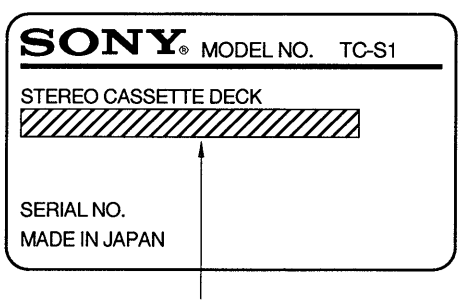
COMPONENTS IDENTIFIED BY MARK ⚠ OR DOTTED LINE WITH MARK ⚠ ON THE SCHEMATIC DIAGRAMS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

* Dolby noise reduction extension manufactured under license from Dolby Laboratories Licensing Corporation. HX Pro originated by Bang & Olufsen. "DOLBY", the double-D symbol ◻◻ and "HX PRO" are trademarks of Dolby Laboratories Licensing Corporation.

MODEL IDENTIFICATION

— Model Number Portion —

Printed on rear cabinet



AEP, UK, German, Italian model : AC: 220—230V~50/60Hz
Singapore, Tourist model : AC:110—120/220—240V~50/60Hz

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SECTION 1
GENERAL

This section is extracted from instruction manual.

INFORMATION

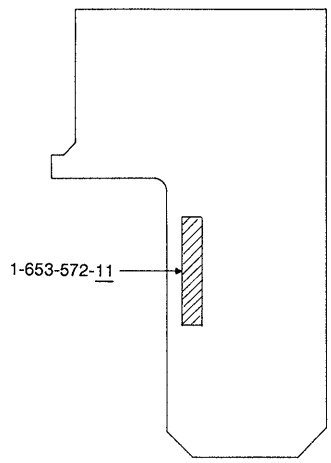
For this set, there are two kinds of MAIN boards, PANEL boards, POWER boards, SUB (A) boards and SUB (B) boards.

HOW TO IDENTIFY

You can identify a former type or a new type from the last code of a board printed on the MAIN board, as shown below :

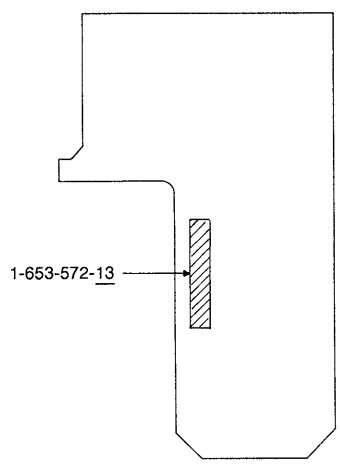
FORMER TYPE (AEP, G, IT)

[MAIN BOARD] (COMPONENT SIDE)



NEW TYPE (AEP, G, IT, UK, SP, JE)

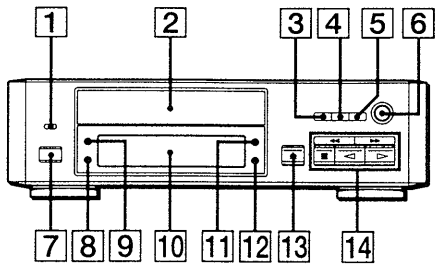
[MAIN BOARD] (COMPONENT SIDE)



Index to Parts and Controls

Front panel

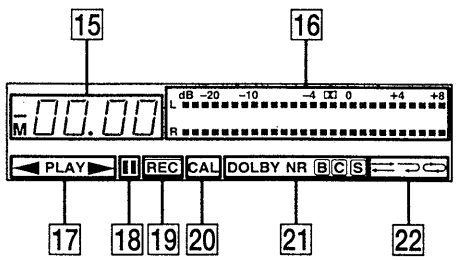
Refer to the pages indicated in parenthesis for details.



1 TIMER selector (10)
2 Cassette tray (5)
3 ❚❚ PAUSE button (5)
4 ● REC (recording) button (7)
5 AUTO CAL (recording calibration) button (8)
6 REC (recording) LEVEL control (8)
7 POWER switch (5)
8 MEMORY button (6)
9 RESET button (6)
10 Display
11 DIRECTION (Direction) button (5)
12 DOLBY NR (noise reduction) button (5)
13 ⏏ OPEN/CLOSE button (5)
14 Tape operating buttons (5)
■ (stop) button
◀◀/▶▶ (fast leftward / rightward) (AMS*) buttons
◁/▷ (upper / lower side play) buttons

* AMS: Automatic Music Sensor

Display section

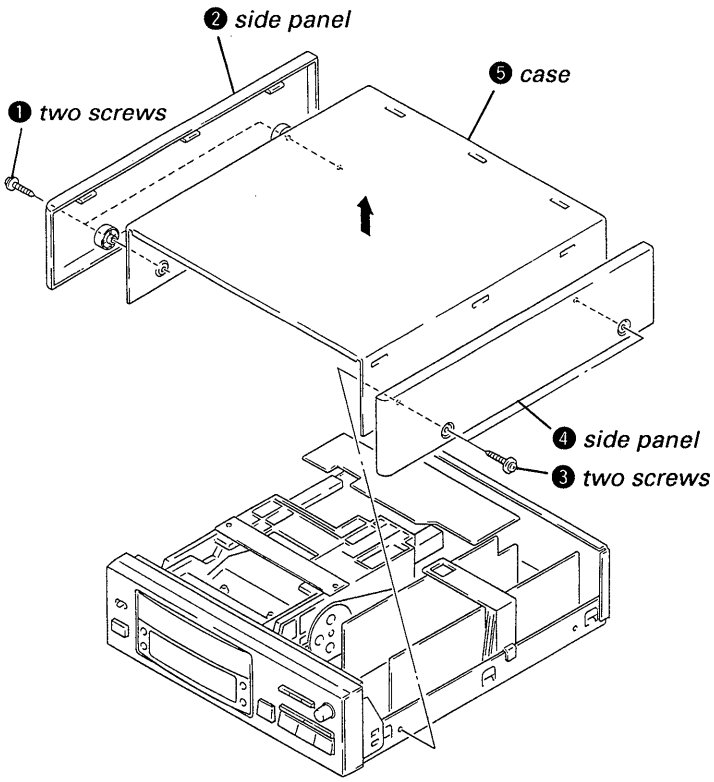


15 Tape counter indication
16 Peak level meter
17 Deck status indicator
18 PAUSE indicator
19 REC (recording) indicator
20 CAL (calibration) indicator
21 DOLBY NR indicator
22 Direction mode indicator

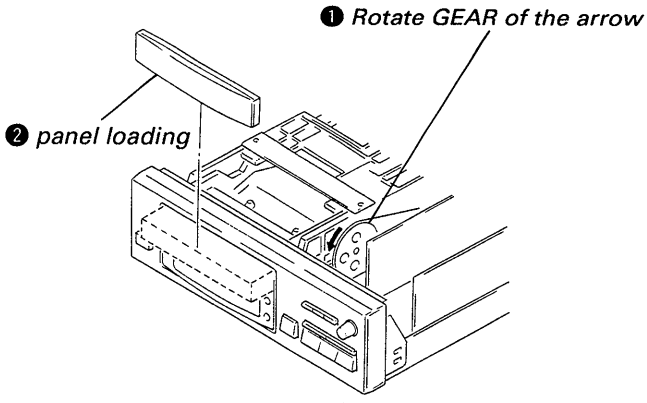
SECTION 2
DISASSEMBLY

NOTE: Follow the disassembly procedure in the numerical order given.

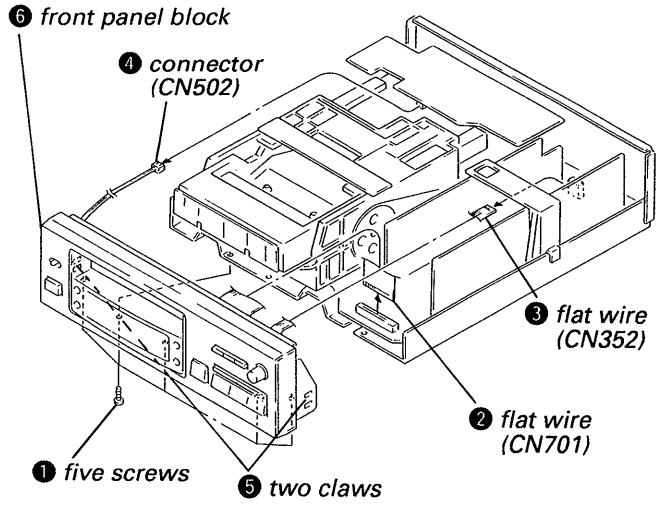
2-1. CASE REMOVAL



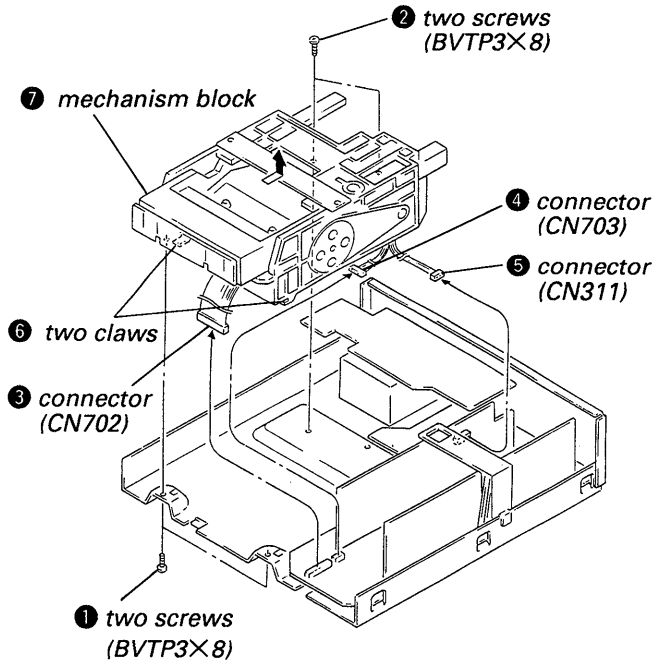
2-2. PANEL LOADING REMOVAL



2-3. FRONT PANEL BLOCK REMOVAL



2-4. MECHANISM BLOCK REMOVAL



SECTION 3
ADJUSTMENTS

3-1. MECHANICAL ADJUSTMENTS

PRECAUTION

1. Clean the following parts with a denatured alcohol-moistened swab:
   record/playback/erase head　　pinch roller
   rubber belts　　capstan
   idlers
2. Demagnetize the record/playback head with a head demagnetizer. (Head demagnetizer do not approach for the erase head.)
3. Do not use a magnetized screwdriver for the adjustment.
4. After the adjustments, apply suitable locking compound to the parts adjusted.
5. The adjustments should be performed with the rated power supply voltage unless otherwise noted.

Torque Measurement

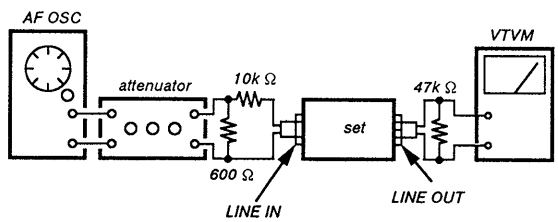
Torque	Torque meter	Meter reading
Forward	CQ-102C	30 to 65g • cm (0.42 to 0.90 oz • inch)
Forward back tension	CQ-102C	1.5 to 6g • cm (0.021 to 0.083 oz • inch)
Reverse	CQ-102RC	30 to 65g • cm (0.42 to 0.90 oz • inch)
Reverse back tension	CQ-102RC	1.5 to 6g • cm (0.021 to 0.083 oz • inch)
FF/REW	CQ-201B	70 to 130g • cm (0.972 to 1.80 oz • inch)

3-2. ELECTRICAL ADJUSTMENTS

PRECAUTION

1. The adjustment should be performed in the publication. (Be sure to male playback adjustment at first.)
2. The adjustments and measurement should be performed for both L-CH and R-CH.
   - Switch position
     DOLBY NR switch　　: OFF
     DIRECTION switch　　: ⇄
     TIMER switch　　: OFF
   - Standard record position :
     Deliver the standard input signal level to input jack and set the REC LEVEL (RV301) control to obtain the standard output signal level as follows.

– Record Mode –



Standard Input Level

Input terminal	LINE IN
source impedance	10k Ω
input signal level	0.5V (– 3.8dB)

Standard Output Level

Output terminal	LINE OUT (L-CH)
load impedance	47k Ω
output signal level	0.5V (– 3.8dB)

Test Tape

Tape	Contents	Use
P-4-A100	10kHz, – 10dB	Azimuth Adjustment
P-4-L300	315Hz, 0dB	PB Level Adjustment
WS-48B	3kHz, 0dB	Tape Speed Adjustment

0dB=0.775V

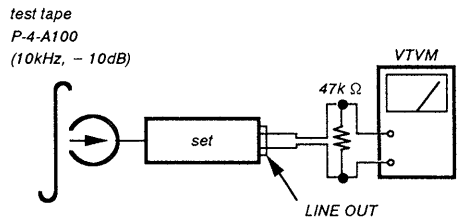
Test Mode

1. Insert a short-circuit plug into TP701 (2P) and turn ON the power switch. (Earth pin ⑩ of IC701 and turn ON the power switch.)
   At first, all the fluorescent tubes light up, then the system returns to normal display.
2. To release the test mode, remove the short plug and turn off the power switch.
3. Remove the short plug after completion of adjustment.

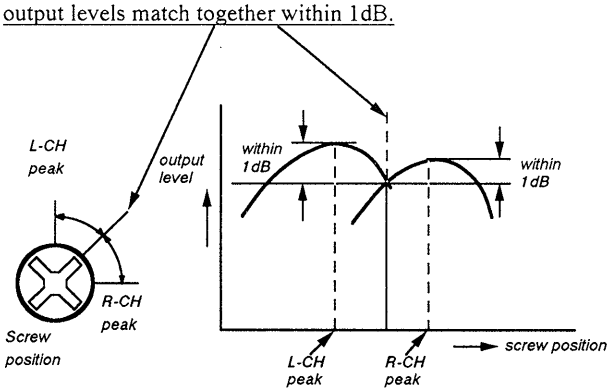
Record/Playback Head Azimuth Adjustment

Procedure :

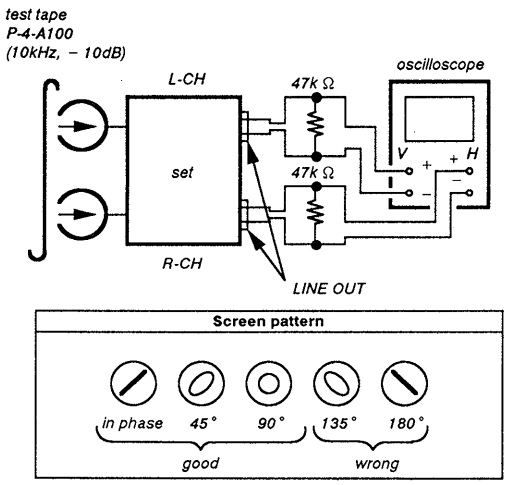
1. Forward playback Mode



2. Turn the adjustment screw for the maximum output levels. If these levels do not match, turn the adjustment screw until both of output levels match together within 1dB.

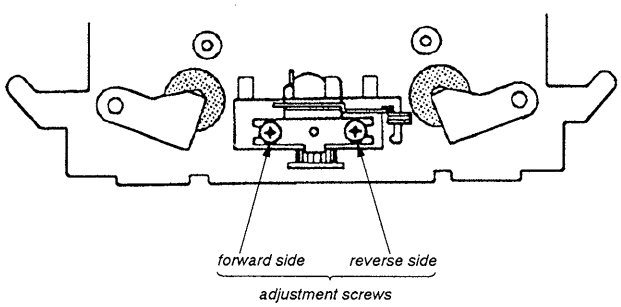


3. Playback Mode



4. Change the reveres playback mode and repeat the steps 1 to 3.
5. After the adjustment, lock the adjustment screws with suitable locking compound.

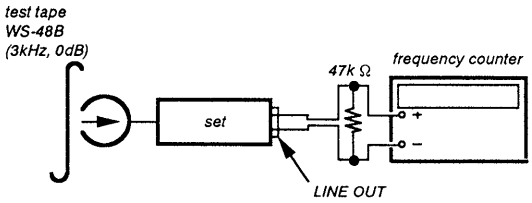
Adjustment Location : – record/playback head –



Tape Speed Adjustment

Procedure :

– Forward Playback Mode –



1. Set to FWD playback mode.
2. Adjust RV701 so that the frequency counter reeding becomes 3,000 ± 15Hz.

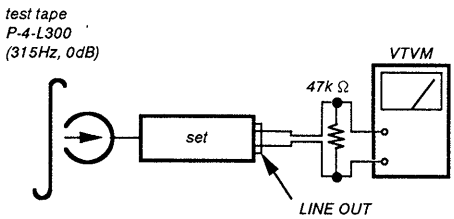
Frequency difference between the beginning and the end of the tape should be within 3%.

Adjustment Location : MAIN board

Playback Level Adjustment

Procedure :

– Forward Playback Mode –



Adjust RV101 (L-CH) and RV201 (R-CH) so the VTVM reading becomes the adjustment limits below.

Adjustment Value :

LINE OUT level : – 7.7 ± 0.5dB (0.301 to 0.338V)

Level difference between channels : within 2dB

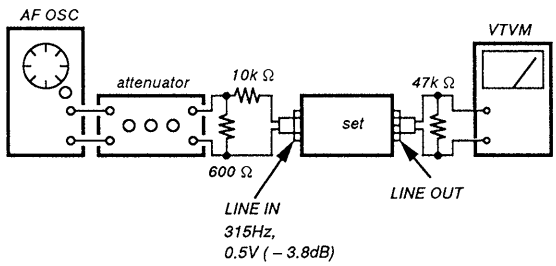
Confirm the LINE OUT level does not change in playback mode while changing the mode from playback to stop several times.

Adjustment Location : SUB (B) board

R-CH Gain Adjustment

Procedure :

– Record Mode –



Adjust RV205 so the VTVM reading becomes the adjustment limits below.

Adjustment Value :

LINE OUT level : – 3.8 ± 0.5dB (0.472 to 0.530V)

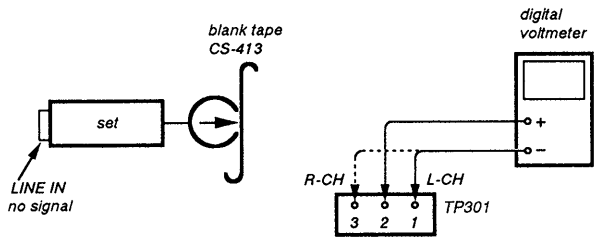
Adjustment Location : SUB (A) board

Bias Consumption Current Adjustment

This adjustment should be performed when replacing the head assy or the bias oscillating transformer (T352, 353).

Procedure :

( ) : R-CH



1. Connect the digital voltmeter to test point TP301.
2. Set RV102 (RV202) to mechanical center.
3. Set to FWD record mode.
4. Adjust T352 (T353) so that the digital voltmeter reading becomes minimum.

Adjustment Value : Maximum 220mV

Adjustment Location : SUB (B) board

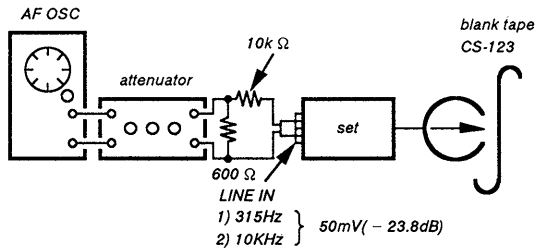
Record Bias Adjustment

Setting :

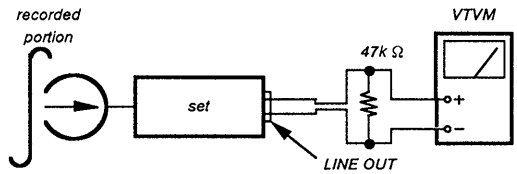
REC LEVEL control : standard record position (Refer to page 5.)

Procedure :

1. Record Mode



2. Playback Mode



Confirm that the 10kHz playback output is 0 ± 0.5dB relative to the 315Hz output. If necessary, adjust RV102 (L-CH), RV202 (R-CH) and repeat the steps given above.

Adjustment Location : SUB (B) board

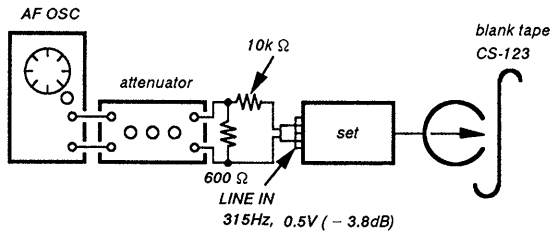
Record Level Adjustment

Setting :

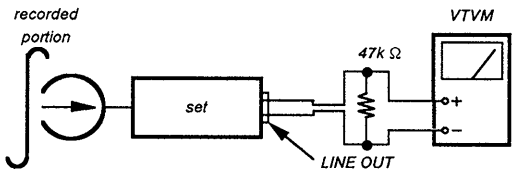
REC LEVEL control : standard record position (Refer to page 5.)

Procedure :

1. Record Mode



2. Playback Mode



Confirm playback the tape recorded become adjustment level as follows.

If necessary, adjust RV103 (L-CH), RV203 (R-CH) and repeat the steps 1 and 2.

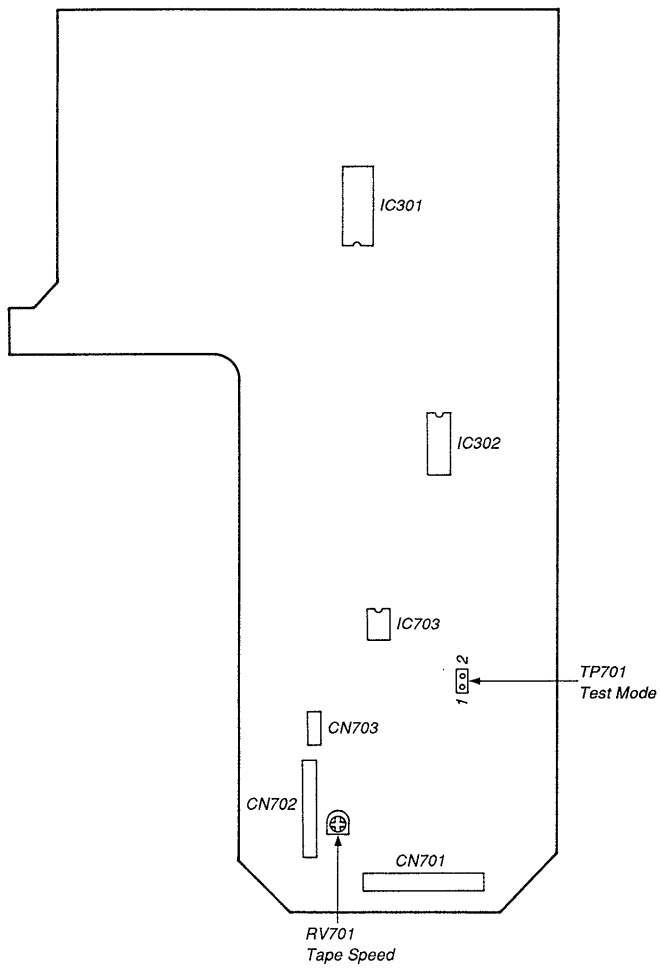
Adjustment Value :

LINE OUT level : − 3.8 ± 0.5dB (0.47 to 0.53V)

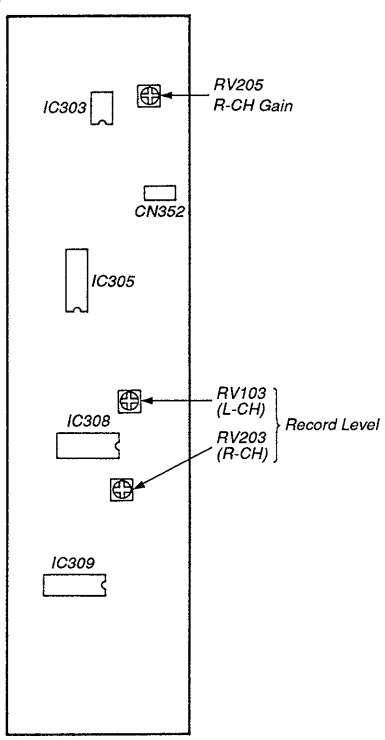
Adjustment Location : SUB (A) board

– Adjustment Parts Location Diagrams –

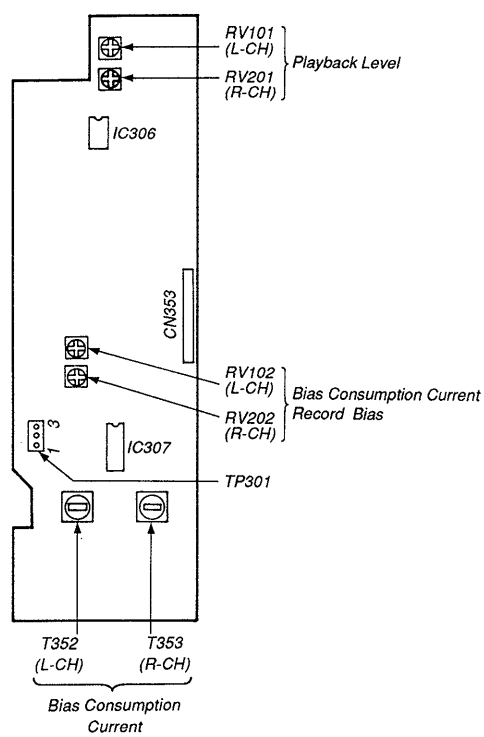
【MAIN BOARD】 (COMPONENT SIDE)



【SUB (A) BOARD】 (COMPONENT SIDE)



【SUB (B) BOARD】 (COMPONENT SIDE)



SECTION 4
DIAGRAMS

4-1. IC PIN FUNCTION

• IC701 SYSTEM CONTROL (M38172M4-102FP)

Pin No.	Signal Name	I/O	Description
1	ME R	I	Digital peak level meter signal (R-CH) input
2	ME L	I	Digital peak level meter signal (L-CH) input
3	KEY 2	I	A/D conversion key input *1
4	KEY 1	I	A/D conversion key input *1
5	FWD REC	I	FWD side erase proof detection input from the S902
6	CROM	I	CrO_2 cassette tape detection input from the S903
7	RVS REC	I	REV side erase proof detection input from the S904
8	METAL	I	Metal cassette tape detection input from the S906
9	PLAY	I	Play and stop detection input from the S907
10	TEST	I	Terminal for test mode setting Normally: "H", Test mode: "L"
11	POW OUT	O	Not used this set (open)
12	POW IN	I	Power down detection input Power ON: "H", Standby: "L"
13	L MOT +	O	Loading motor (M901) drive output *2
14	L MOT -	O	Loading motor (M901) drive output *2
15-17	GP0-GP2	O	GP control output to REC EQ amp (IC308)
18-20	REC 0-REC 2	O	Level control output to REC EQ amp (IC308)
21	CLOCK	O	Clock signal output to backup memory (IC703)
22	DATA	O	Data signal output to backup memory (IC703)
23	RELAY	O	Relay drive (REC/PB) output REC: "L", PB: "H"
24	BIAS	O	REC bias control signal output to REC bias switch (IC705)
25	AUB OUT	O	Audio bus signal output
26	AUB IN	I	Audio bus signal input
27	RESET	I	Reset signal input from reset signal generator (IC702) RESET: "L"
28	XCIN	I	Not used this set (Fixed at "L")
29	XCOUT	O	Not used this set (open)
30	XIN	I	System clock input (4MHz)
31	XOUT	O	System clock output (4MHz)
32	VSS(GND)	-	Ground terminal
33	REC MUTE	O	REC mute on/off control signal output "L": Mute on
34	CAL MUTE	O	Calibration mute on/off control signal output "L": Mute on
35	LINE MUTE	O	Line mute on/off control signal output "L": Mute on
36, 37	M CNT 2, 1	O	Mode control signal output to dolby NR amp (IC301)
38	DOL $\overline{BC}$/S	O	Dolby NR BC and S select signal output Dolby B and C: "L", Dolby S: "H"
39	DOL B/$\overline{C}$	O	Dolby NR B and C select signal output Dolby C: "L", Dolby B: "H"
40	DOL $\overline{ON}$/OFF	O	Dolby NR on/off select signal output Dolby on: "L", Dolby off: "H"
41	70U	O	70u/120u select signal output 70u: "H", 120u: "L"
42, 43	N.C.	-	No connection (open)
44-48	G5-G1	O	Grid signal output to fluorescent indicator tube (FL901)
49-57	P17-P9	O	Segment signal output to fluorescent indicator tube (FL901)

	MPX	CAL	PB
M CNT 1 (Pin 37)	L	H	H
M CNT 2 (Pin 36)	L	L	H

Pin No.	Signal Name	I/O	Description
58-64	P7-P1	O	Segment signal output to fluorescent indicator tube (FL901)
65-68	BIAS CAL 3-0	O	Bias calibration control signal output
69	OSC H/L	O	Calibration H/L select signal output
70	OSC ON/OFF	O	Calibration on/off select signal output "L": ON, "H": OFF
71	SOL	O	Solenoid plunger (PM901) drive signal output
72	CAP M	O	Capstan and Reel motor (M902) drive signal output
73	VCC (+5V)	-	Power supply terminal (+5V)
74	AVEE	-	Power supply (-24V) for FL tube (FL901) segment output
75	AVSS	-	Ground terminal
76	VREF	I	Reference voltage input (+5V)
77	PACK	I	Cassette pack detection input from the S905
78	AMS IN	I	AMS signal input
79	LIM SW	I	Loading detection input from the S901 CLOSE: MID, CENTER: "H", OPEN: "L"
80	PHOTO	I	Rotation detection input from the PH901

*1 Key input

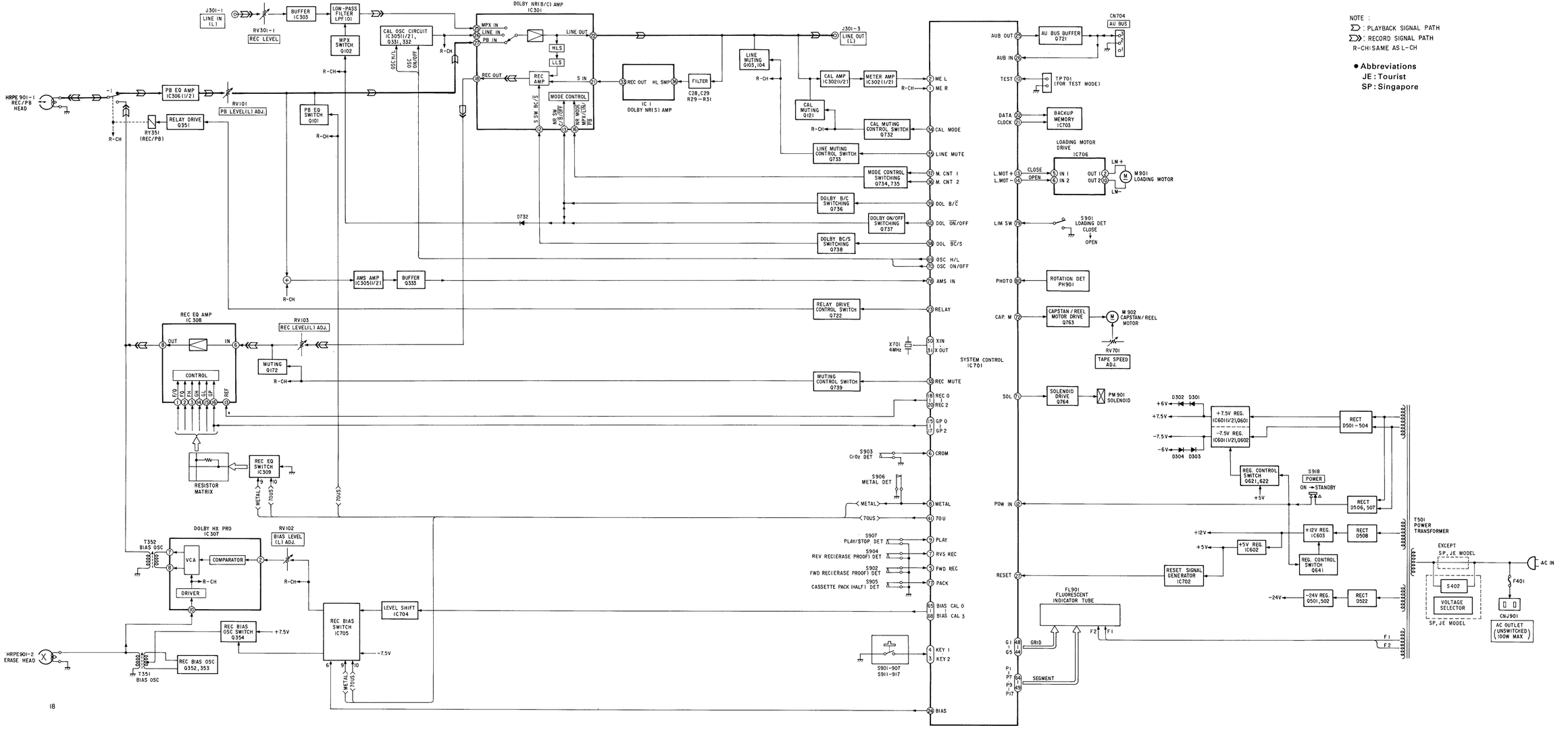
Voltage / Input Port	0V	0.54V	1.17V	1.83V	2.46V	3.13V	3.82V	4.46V	5.02V
Pin④, KEY 1	S901 OPEN/CLOSE ⏏	S902 ■	S903 PAUSE ❚❚	S904 ▷	S905 ◁	S906 DIRECTION	S907 DOLBY NR	—	No Key Input
Pin③, KEY 2	S911 AMS ▶▶	S912 AMS ◀◀	S913 REC ●	S914 RESET	S915 MEMORY	S916 REC CAL	S917 TIMER (REC)	S917 TIMER (PLAY)	No Key Input (Note 1)

Note 1:
TIMER Switch (S917): OFF mode

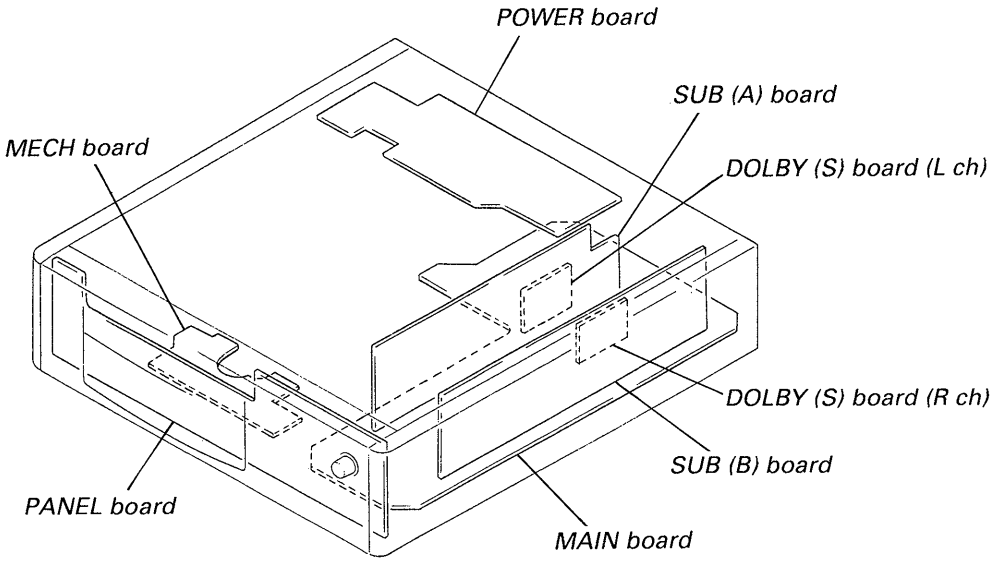
*2 Loading motor (M901) control

	IN	OUT	BRAKE
L MOT+ ⑬(CLOSE)	H	L	H
L MOT- ⑭(OPEN)	L	H	H

4-2. BLOCK DIAGRAM



4-3. CIRCUIT BOARDS LOCATION



• Semiconductor Location

Ref. No.	Location	Ref. No.	Location
D121	F-18	IC601	I-22
D122	F-18	IC602	H-20
D221	E-18	IC603	J-20
D222	E-18	IC701	E-13
D301	H-21	IC702	E-14
D302	H-21	IC703	F-16
D303	E-22	IC704	G-16
D304	E-22	IC705	G-17
D331	B-20	IC706	G-14
D332	B-21		
D341	C-20	PH901	F-6
D351	I-16		
D501	G-28	Q101	G-20
D502	G-29	Q102	G-23
D503	G-29	Q103	E-19
D504	H-29	Q104	E-19
D505	H-30	Q121	E-19
D506	H-29	Q172	B-18
D507	G-29	Q201	F-20
D508	I-29	Q202	E-22
D521	H-30	Q203	E-19
D522	H-29	Q204	E-19
D531	I-28	Q221	E-19
D611	H-23	Q272	B-17
D621	I-20	Q331	B-20
D634	I-21	Q332	B-20
D641	I-21	Q333	C-20
D651	H-23	Q351	I-17
D652	H-23	Q352	J-15
D711	F-15	Q353	J-16
D712	F-15	Q354	I-15
D713	E-16	Q501	H-30
D721	F-16	Q502	H-30
D722	F-16	Q601	I-23
D723	E-16	Q602	H-23
D724	E-16	Q621	I-21
D725	E-17	Q622	I-21
D732	D-21	Q641	I-20
D733	D-14	Q721	F-16
D751	G-15	Q722	F-17
D761	F-14	Q732	F-17
		Q733	E-17
IC301	F-21	Q734	E-16
IC302	E-18	Q735	E-17
IC303	B-22	Q736	E-16
IC305	B-19	Q737	E-16
IC306	J-17	Q738	E-17
IC307	I-13	Q739	E-16
IC308	B-17	Q763	G-12
IC309	B-16	Q764	G-12

Note:
- o—— : parts extracted from the component side.
- ■ : parts mounted on the conductor side.
- [ ]← : indicates side identified with part number.
- ░ : Pattern on the side which is seen.

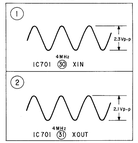
● Abbreviations
G : German
IT : Italian

4-4. PRINTED WIRING BOARDS —MAIN Section— FORMER TYPE (AEP, G, IT)

• See page 15 for Circuit Boards Location.

• See page 36, 37 for Semiconductor Lead Layouts.

• **Waveforms**
(MAIN BOARD)



Note:
- All capacitors are in μF unless otherwise noted. pF: μμF
  50WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and ¼ W or less unless otherwise specified.
- % : indicates tolerance.
- △ : internal component.
- : fusible resistor.

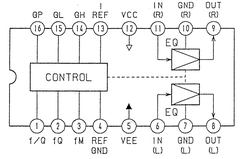
Note: The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

- B+ : B+ Line
- B− : B− Line
- : adjustment for repair.
- Voltage and waveforms are dc with respect to ground under no-signal conditions.
  no mark: STOP
- Voltages are taken with a VOM (Input Impedance 10MΩ). Voltage variations may be noted due to normal production tolerances.
- Waveforms are taken with a oscilloscope. Voltage variations may be noted due to normal production tolerances.
- Circled numbers refer to waveforms.
- Signal path.
  ▷ : PB
  ▷ : REC

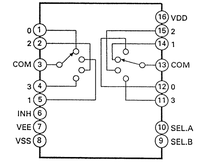
● Abbreviations
G : German
IT : Italian

• **IC Block Diagram**

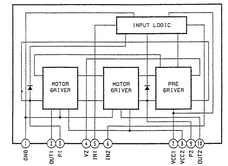
IC308 CXA1198AP



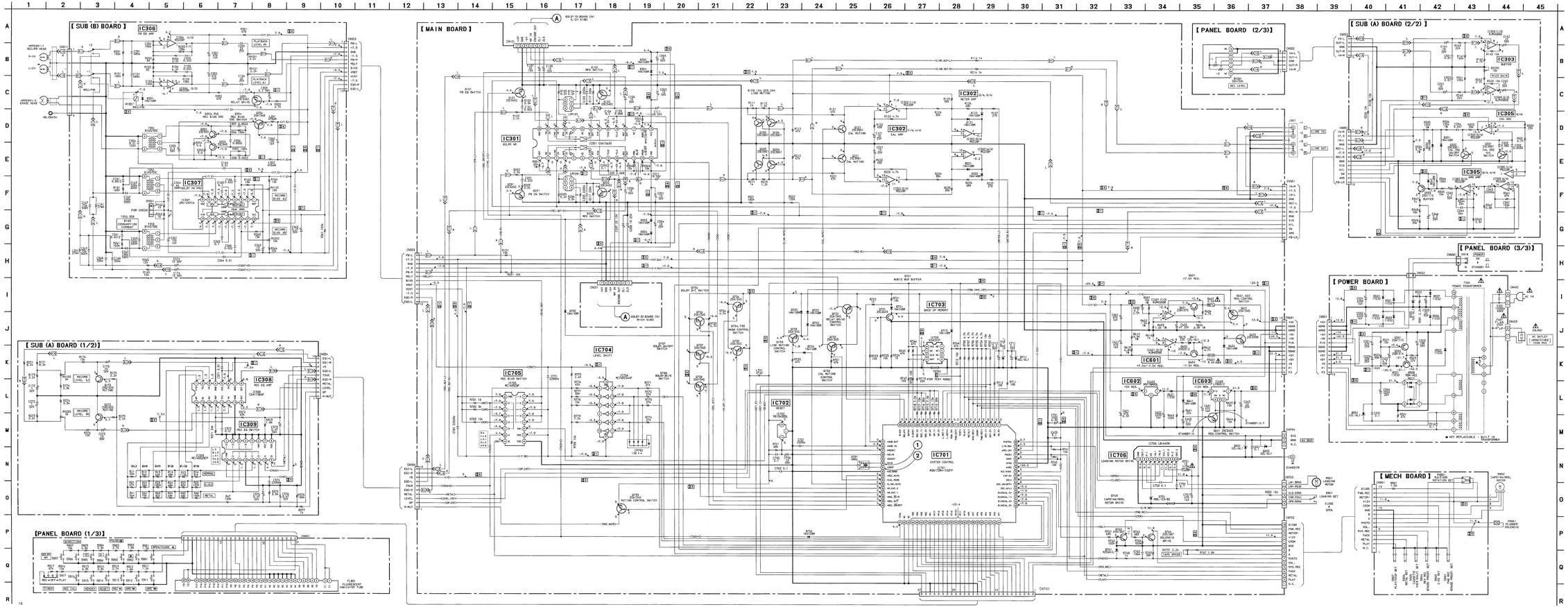
IC309, 705 MC14052BF



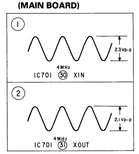
IC706 LB1645N



4-5. SCHEMATIC DIAGRAM —MAIN Section— FORMER TYPE (AEP, G, IT)



• **Waveforms**
(MAIN BOARD)



Note:
- All capacitors are in μF unless otherwise noted. pF: μμF
  50WV or less are not indicated except for electrolytics and tantaliums.
- All resistors are in Ω and ¼ W or less unless otherwise specified.
- % : indicates tolerance.
- △ : internal component.
- : fusible resistor.

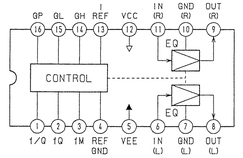
Note: The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

- B+ : B+ Line
- B− : B− Line
- : adjustment for repair.
- Voltage and waveforms are dc with respect to ground under no-signal conditions.
  no mark: STOP
- Voltages are taken with a VOM (Input Impedance 10MΩ).
  Voltage variations may be noted due to normal production tolerances.
- Waveforms are taken with a oscilloscope.
  Voltage variations may be noted due to normal production tolerances.
- Circled numbers refer to waveforms.
- Signal path.
  ▷ : PB
  ▷ : REC

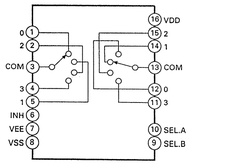
• **Abbreviations**
G : German
IT : Italian
JE : Tourist
SP : Singapore

• **IC Block Diagram**

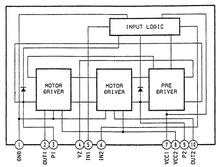
IC308 CXA1198AP



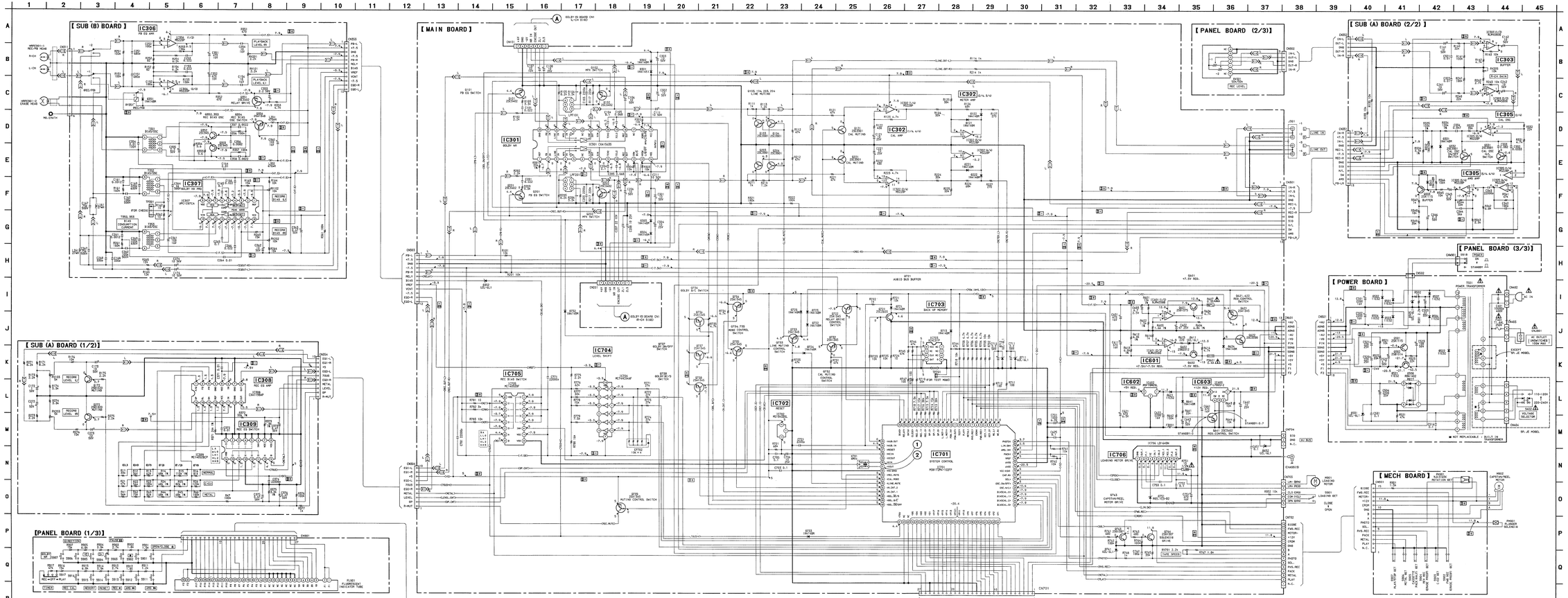
IC309, 705 MC14052BF



IC706 LB1645N



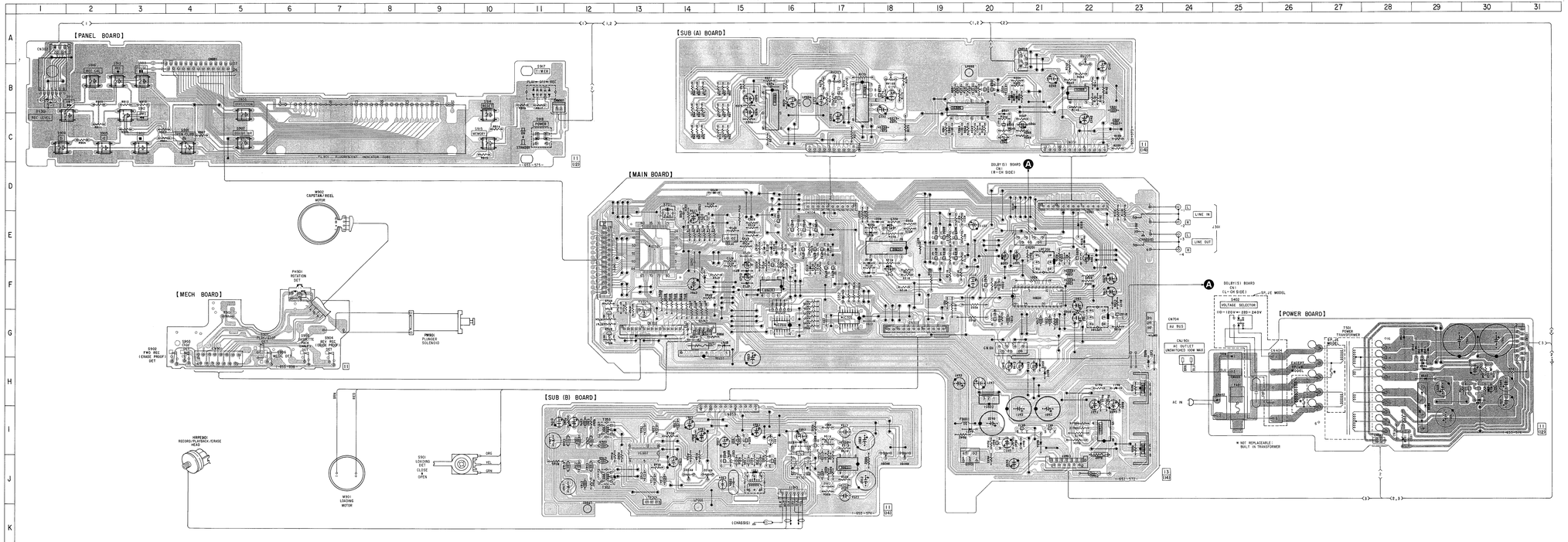
4-6. SCHEMATIC DIAGRAM —MAIN Section— NEW TYPE (AEP, G, IT, UK, SP, JE)



4-7. PRINTED WIRING BOARDS –MAIN Section– NEW TYPE (AEP, G, IT, UK, SP, JE)

• See page 15 for Circuit Boards Location.

• See page 36, 37 for Semiconductor Lead Layouts.



• **Semiconductor Location**

Ref. No.	Location	Ref. No.	Location
D121	F - 18	IC601	I - 22
D122	F - 18	IC602	H - 20
D221	E - 18	IC603	J - 20
D222	E - 18	IC701	E - 13
D301	H - 21	IC702	E - 14
D302	H - 21	IC703	F - 16
D303	E - 22	IC704	G - 16
D304	E - 22	IC705	G - 17
D331	B - 20	IC706	G - 14
D332	B - 21		
D341	C - 20	PH901	F - 6
D351	I - 16		
D352	F - 17	Q101	G - 20
D501	G - 28	Q102	G - 23
D502	G - 29	Q103	E - 19
D503	G - 29	Q104	E - 19
D504	H - 29	Q121	E - 19
D505	H - 30	Q172	B - 18
D506	H - 29	Q201	F - 20
D507	G - 29	Q202	E - 22
D508	I - 29	Q203	E - 19
D521	H - 30	Q204	E - 19
D522	H - 29	Q221	E - 19
D531	I - 28	Q272	B - 17
D611	H - 23	Q331	B - 20
D621	I - 20	Q332	B - 20
D634	I - 21	Q333	C - 20
D641	I - 21	Q351	I - 17
D652	H - 23	Q352	J - 15
D711	F - 15	Q353	J - 16
D712	F - 15	Q354	I - 15
D713	E - 16	Q501	H - 30
D721	F - 16	Q502	H - 30
D722	F - 16	Q601	I - 23
D723	E - 16	Q602	H - 23
D724	E - 16	Q621	I - 21
D725	E - 17	Q622	I - 21
D732	D - 21	Q641	I - 20
D733	D - 14	Q721	F - 16
D751	G - 15	Q722	F - 17
D761	F - 14	Q732	F - 17
		Q733	E - 17
IC301	F - 21	Q734	E - 16
IC302	E - 18	Q735	E - 17
IC303	B - 22	Q736	E - 16
IC305	B - 19	Q737	E - 16
IC306	J - 17	Q738	E - 17
IC307	I - 13	Q739	E - 16
IC308	B - 17	Q763	G - 12
IC309	B - 16	Q764	G - 12

Note:

- ⟷ : parts extracted from the component side.
- ■ : parts mounted on the conductor side.
- ⬚ : indicates side identified with part number.
- ▨ : Pattern on the side which is seen.

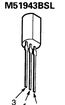
• Abbreviations

G : German
IT : Italian
JE : Tourist
SP : Singapore

• Semiconductor Lead Layouts

CXA1198AP
MC14052BCP

M51943BSL



μPC1297CA

2SC945-P
2SD1387-4

CXA1417Q

M5220OP
M5218AP
NJM4580D
μPC4558C
X24C01P-S

2SA1175-HFE
LETTER SIDE

11ES2
1N4148M
HZS6A1L
RD5.1ES82

CXA1563S

M5228P

2SB1094-LK
2SD2012

NJL5165K

L780S12

M5F78M05L

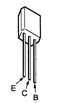
2SB1116-K

RBA-402

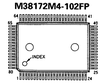
LB1645N

MC14052BF

2SC2603-EF
2SD1020-HFE
DTA114ES
DTA144ES
DTC114ES
DTC143TS
DTC144ES



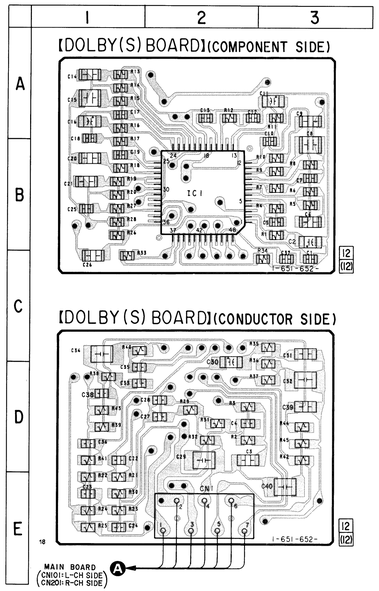
M38172M4-102FP



SN74HC04ANS
SN74HC04ANS-E20

4-8. PRINTED WIRING BOARD —DOLBY (S) Section—

• See page 15 for Circuit Boards Location.



Note:

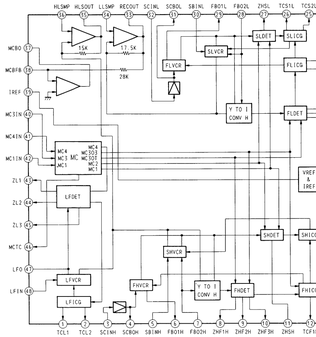
- ○——— : parts extracted from the component side.
- ● : Through hole.
- ▨ : Pattern from the side which enables seeing.

(The other layers' patterns are not indicated.)

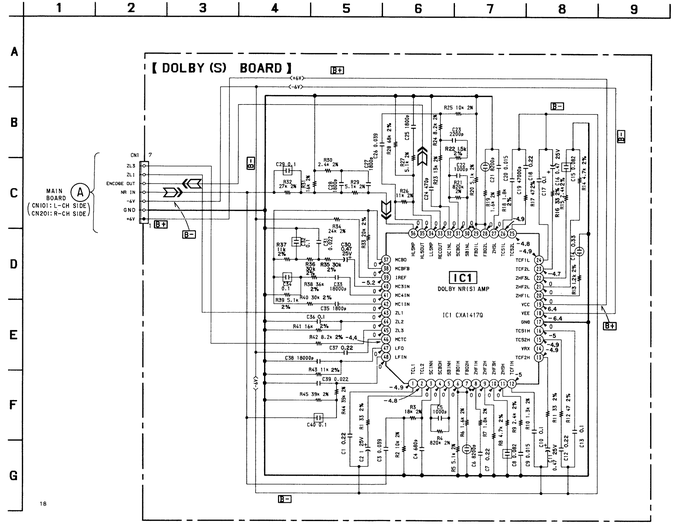
Caution:	
Pattern face side: (Conductor Side)	Parts on the pattern face side seen from the pattern face are indicated.
Parts face side: (Component side)	Parts on the parts face side seen from the parts face are indicated.

• IC Block Diagram

IC1 CXA1417Q



4-9. SCHEMATIC DIAGRAM —DOLBY (S) Section—



Note:

- All capacitors are in μF unless otherwise noted. pF: μμF 50WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and ¼ W or less unless otherwise specified.
- B+ : B+ Line
- B- : B- Line
- Voltage is dc with respect to ground under no-signal conditions. no mark : STOP
- Voltages are taken with a VOM (Input Impedance 10MΩ). Voltage variations may be noted due to normal production tolerances.
- Signal path. : REC

SECTION 5
EXPLODED VIEWS

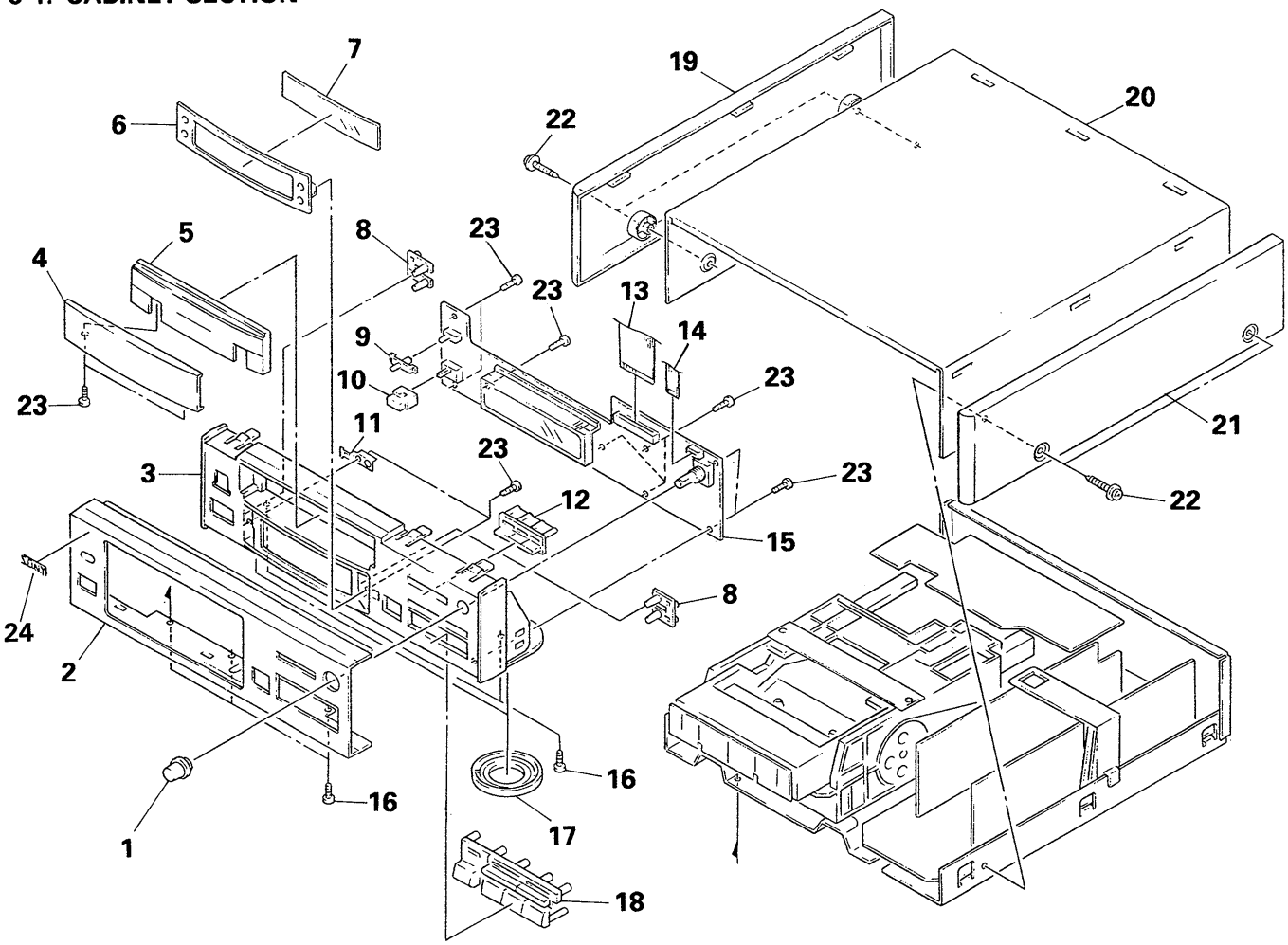
NOTE:

- –XX, –X mean standardized parts, so they may have some differences from the original one.
- Color Indication of Appearance Parts
  Example:
  KNOB, BALANCE (WHITE)...(RED)
  ↑ ↑
  Parts color Cabinet's color
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- The mechanical parts with no reference number in the exploded views are not supplied.
- Hardware (#mark) list and accessories and packing materials are given in the last of this parts list.

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

- Abbreviations
  IT : Italian JE : Tourist
  G : German SP : Singapore

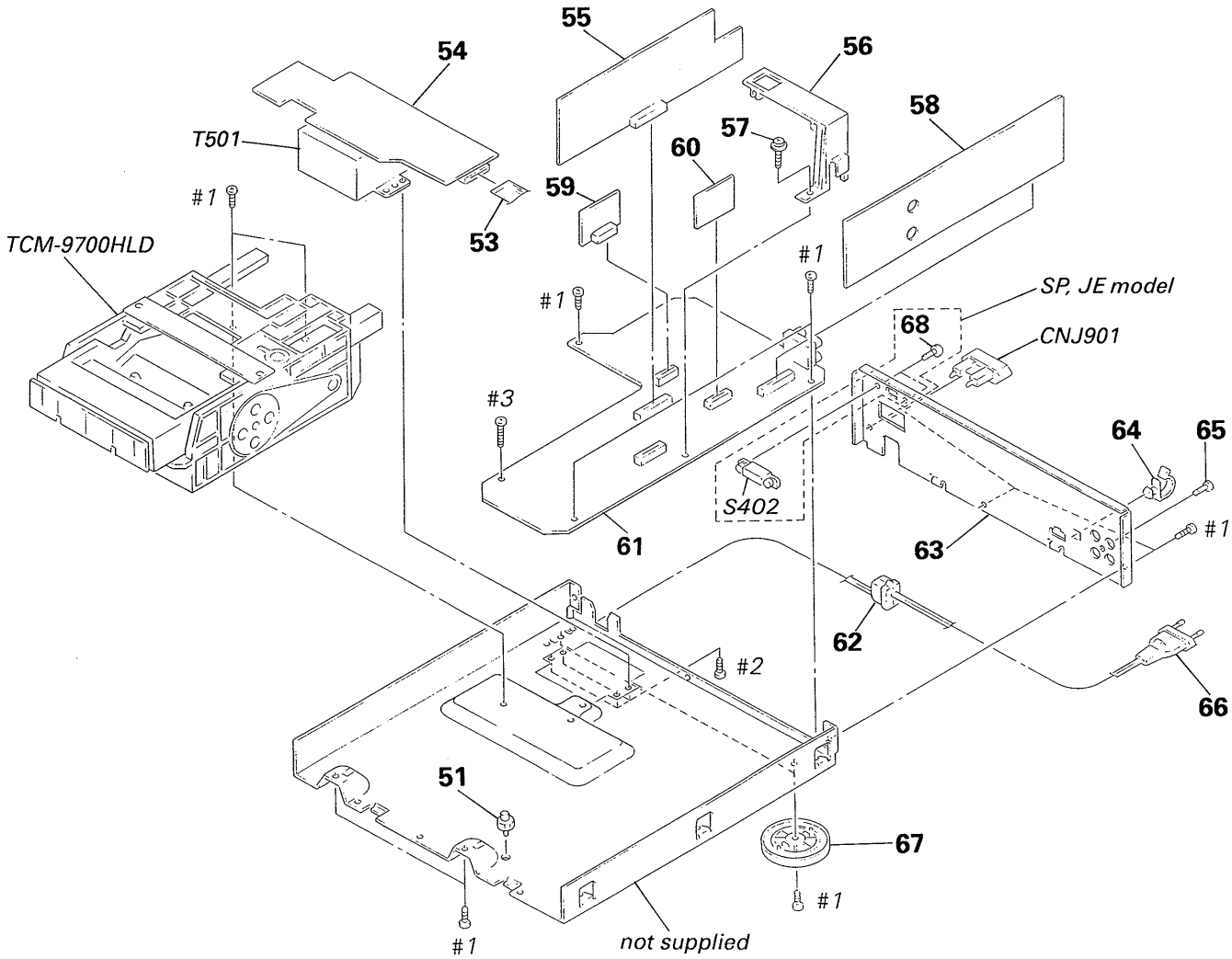
5-1. CABINET SECTION



Ref. No.	Part No.	Description	Remark
1	X-3369-334-2	KNOB (REC) ASSY	
2	3-916-801-01	PANEL, FRONT	
3	3-916-810-01	PANEL (FL)	
4	3-916-808-01	PANEL (AL), LOADING	
5	3-916-809-02	PANEL (MOLD), LOADING	
6	3-916-802-01	BASE (TC. CD), PANEL	
7	3-916-795-01	PLATE (TC. CD), INDICATION	
8	3-916-806-02	BUTTON (DOLBY)	
9	3-917-216-02	KNOB (TIMER)	
10	4-968-098-01	BUTTON (P)	
11	4-970-623-11	SPRING (HB), LEAF	
12	3-916-805-02	BUTTON (REC)	

Ref. No.	Part No.	Description	Remark
13	1-765-645-11	WIRE (FLAT TYPE) (27 CORE)	
14	1-696-981-11	WIRE (FLAT TYPE) (5 CORE)	
* 15	1-653-575-11	PANEL BOARD	
16	3-704-515-21	SCREW (BV/RING)	
17	X-4945-079-1	RING ASSY, FOOT	
18	X-3369-314-2	BUTTON (FF. PLAY) ASSY	
19	X-4945-476-1	PANEL (L) ASSY, SIDE	
20	4-967-150-31	CASE	
21	X-4945-477-1	PANEL (R) ASSY, SIDE	
22	4-969-954-01	SCREW (SIDE PANEL)	
23	4-951-620-01	SCREW (2.6X8), +BVTP	
24	4-969-961-11	EMBLEM (NO. 4), SONY	

5-2. CHASSIS SECTION

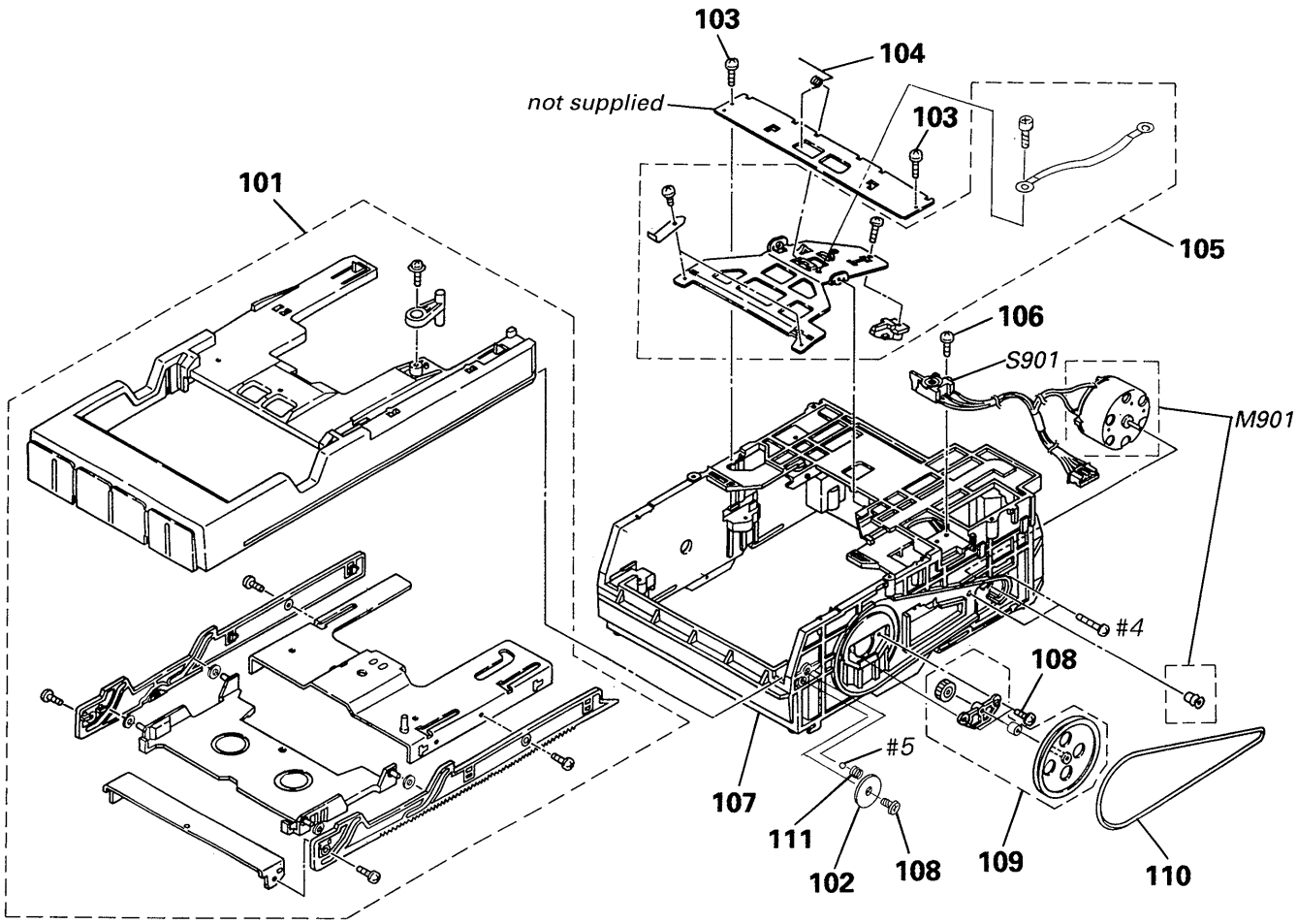


The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

Ref. No.	Part No.	Description	Remark
* 51	4-968-100-01	SUPPORT, PC	
53	1-590-036-11	WIRE (FLAT TYPE) (13 CORE)	
* 54	1-653-576-11	POWER BOARD	
* 55	A-2007-258-A	SUB (A) BOARD, COMPLETE	
* 56	3-916-798-01	HOLDER (PC BOARD)	
57	4-962-549-01	SCREW (3X10)	
* 58	A-2007-259-A	SUB (B) BOARD, COMPLETE	
* 59	A-2007-173-A	DOLBY (S) BOARD, COMPLE (L ch)	
* 60	A-2007-173-A	DOLBY (S) BOARD, COMPLE (R ch)	
* 61	A-2007-270-A	MAIN BOARD, COMPLETE	
* 62	3-703-244-00	BUSHING (2104), CORD	
* 63	3-916-797-12	PANEL, BACK (AEP, G, IT)	

Ref. No.	Part No.	Description	Remark
* 63	3-916-797-31	PANEL, BACK (SP, JE)	
* 63	3-916-797-41	PANEL, BACK (UK)	
* 64	4-949-235-01	HOOK	
65	3-704-515-41	SCREW (BV/RING)	
⚠66	1-575-651-21	CORD, POWER (EXCEPT UK)	
⚠66	1-769-639-11	CORD, POWER (UK)	
67	X-4945-129-1	FOOT ASSY	
68	4-951-620-31	SCREW (2.6), +BVTP (SP, JE)	
⚠CNJ901	1-526-794-11	OUTLET, AC	
⚠S402	1-570-046-21	SWITCH, VOLTAGE CHANGE (SP, JE)	
⚠T501	1-426-815-11	TRANSFORMER, POWER (AEP, G, IT, UK, SP)	
⚠T501	1-426-816-11	TRANSFORMER, POWER (JE)	

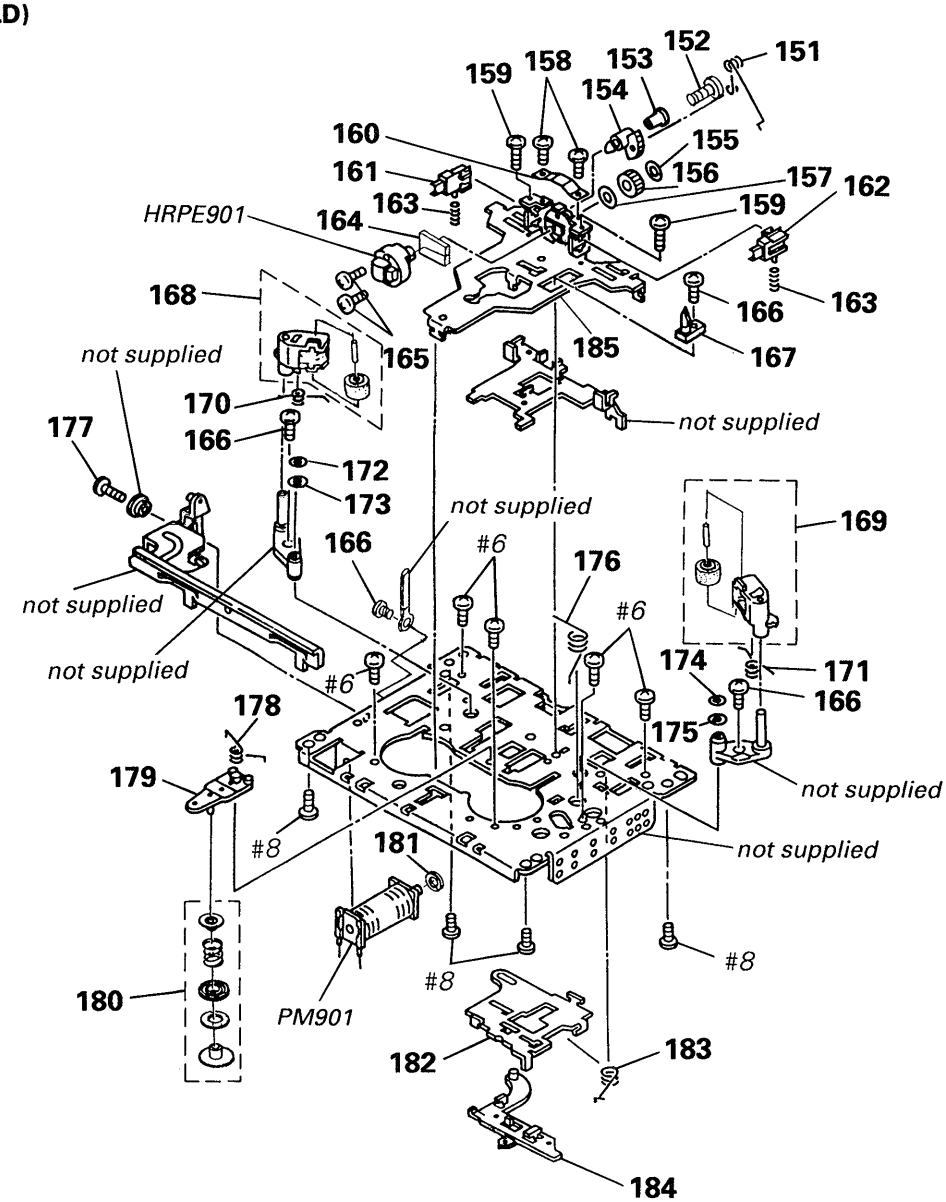
5-3. MECHANISM SECTION-1 (TCM-9700HLD)



Ref. No.	Part No.	Description	Remark
101	A-2004-430-A	TRAY (A) ASSY	
102	3-918-630-01	WASHER, FLAT	
103	3-917-502-01	SCREW (2X8), +BTT	
104	3-917-501-01	SPRING, TOGGLE	
105	A-2004-429-A	CLAMP (B) ASSY	
106	3-917-498-01	SCREW (2.6X6), +BTT	
107	3-917-496-01	CHASSIS (MAIN)	

Ref. No.	Part No.	Description	Remark
108	3-917-497-01	SCREW (2.6X5), +BTT	
109	X-3369-090-1	GEAR ASSY	
110	3-917-499-01	BELT	
111	3-918-629-01	SPRING (A), COMPRESSION	
M901	X-3369-091-1	MOTOR ASSY (LODING)	
S901	1-571-300-21	SWITCH, ROTARY (LOADING DET)	

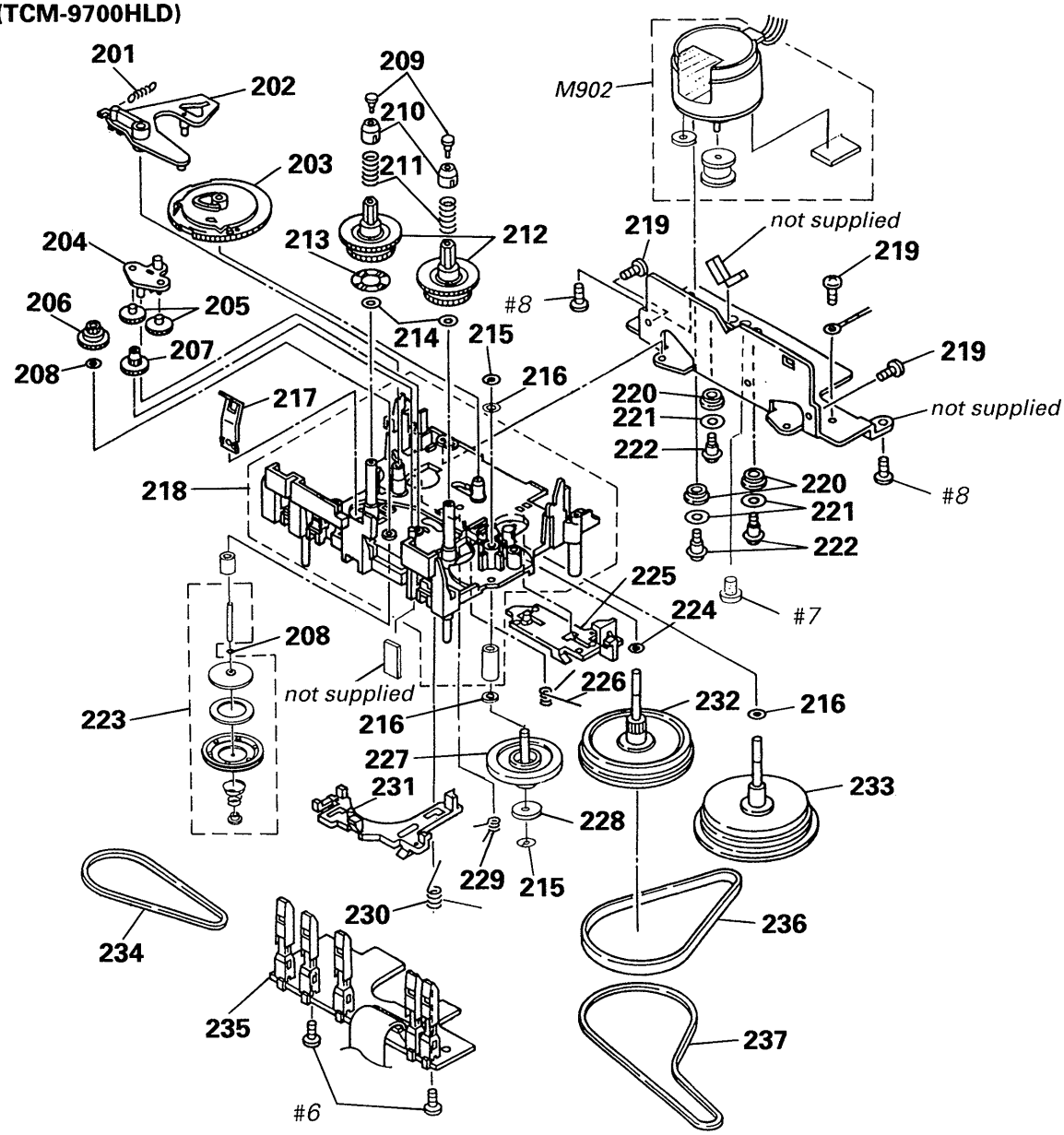
5-4. MECHANISM SECTION-2 (TCM-9700HLD)



Ref. No.	Part No.	Description	Remark
151	3-917-530-01	SPRING (RETURN), TOGGLE	
152	3-917-536-01	SCREW (POWER LOCK)	
153	3-917-526-01	COLLAR	
154	3-917-528-01	GEAR (RETURN)	
155	3-917-534-01	WASHER, POLY-SLIDER	
156	3-917-527-01	GEAR (ROTATION)	
157	3-917-540-01	WASHER, POLY-SLIDER	
158	3-917-531-01	SCREW (AZIMUTH)	
159	3-917-541-01	SCREW (2X5)	
160	3-917-524-01	SPRING (AZIMUTH)	
161	3-917-539-01	GUIDE (R), TAPE	
162	3-917-538-01	GUIDE (L), TAPE	
163	3-917-537-01	SPRING(TAPE GUIDE), COMPRESSION	
164	3-917-532-01	CLAMP, HEAD WIRE	
165	3-917-533-01	SCREW (HEAD RVS)	
166	3-917-565-01	SCREW (2X4), +PTT	
167	3-917-529-01	GUIDE (CASSETTE)	
168	A-2004-434-A	ARM (R) ASSY, P ROLLER	
169	A-2004-435-A	ARM (L) ASSY, P ROLLER	

Ref. No.	Part No.	Description	Remark
170	3-917-556-01	SPRING (P ROLLER ARM R), TOGGLE	
171	3-917-557-01	SPRING (P ROLLER ARM L), TOGGLE	
172	3-917-561-01	WASHER, NYLON	
173	3-917-558-01	WASHER, POLY-SLIDER	
174	3-917-562-01	WASHER, NYLON	
175	3-917-559-01	WASHER, POLY-SLIDER	
176	3-917-555-01	SPRING (HEAD CHASSIS H), TOGGLE	
177	3-917-566-01	SCREW (2X6), +PTT	
178	3-917-553-01	SPRING (PLAY ARM), TOGGLE	
179	3-917-549-01	ARM, PLAY	
180	A-2004-436-A	GEAR ASSY, PLAY	
181	3-917-568-01	WASHER, POLY-SLIDER	
182	3-917-547-01	LEVER, SHIFT	
183	3-917-554-01	SPRING (SHIFT H), TOGGLE	
184	3-917-550-01	ARM, SELECT	
185	A-2004-432-A	CHASSIS BLOCK ASSY, HEAD	
HRPE901	1-500-156-11	HEAD (RE/PB/ERASE)	
PM901	3-917-560-01	SOLENOID	

5-5. MECHANISM SECTION-3 (TCM-9700HLD)



Ref. No.	Part No.	Description	Remark
201	3-917-597-01	SPRING (TRIGGER ARM), TENSION	
202	3-917-590-01	ARM, TRIGGER	
203	3-917-589-01	GEAR, PLAY CAM	
204	3-917-583-01	ARM, FR	
205	3-917-584-01	GEAR, FR	
206	3-917-581-01	GEAR, CLUTCH	
207	3-917-582-01	GEAR, REW	
208	3-917-599-01	WASHER, POLY-SLIDER	
209	3-917-587-01	BUSHING (B), REEL	
210	3-917-586-01	CAP (A), REEL	
211	3-917-594-01	SPRING (REEL C), COMPRESSION	
212	3-917-585-01	GEAR, REEL	
213	3-917-600-01	SEAL, REFLECT	
214	3-917-602-01	FELT, REEL	
215	3-917-604-01	WASHER, POLY-SLIDER	
216	3-701-437-11	WASHER	
217	3-917-580-01	SPRING (PACK KH)	
* 218	X-3369-098-1	BASE (HK) ASSY, MECHANICAL	
219	3-917-565-01	SCREW (2X4), +PTT	

Ref. No.	Part No.	Description	Remark
220	3-917-623-01	CUSHION, MOTOR RUBBER	
221	3-917-622-01	WASHER (B), FLAT	
222	3-917-620-01	SCREW (MOTOR), STEP	
223	X-3369-099-1	CLUTCH (HK) ASSY	
224	3-917-601-01	WASHER, POLY-SLIDER	
225	3-917-588-01	SELECT, SHIFT LEVER	
226	3-917-596-01	SPRING, TOGGLE	
227	3-917-603-01	PULLEY (FLYWHEEL C) ASSY	
228	3-917-605-01	WASHER, NYLON	
229	3-917-595-01	SPRING (CLUTCH ARM), TOGGLE	
230	3-917-598-01	SPRING (BRAKE ARM), TOGGLE	
231	3-917-591-01	ARM, BRAKE	
232	3-917-592-01	FLYWHEEL (RD) (HK) ASSY	
233	3-917-593-01	FLYWHEEL (LD) (HK) ASSY	
234	3-917-608-01	BELT (HK-3), DRIVE	
* 235	1-653-898-11	MECH BOARD	
236	3-917-606-01	BELT (HK-1), DRIVE	
237	3-917-607-01	BELT (HK-2), DRIVE	
M902	X-3369-100-1	MOTOR (HK) ASSY (CAPSTAN/REEL)	

SECTION 6
ELECTRICAL PARTS LIST

DOLBY (S)

NOTE:

- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- -XX and -X mean standardized parts, so they may have some difference from the original one.
- RESISTORS
  All resistors are in ohms.
  METAL:Metal-film resistor.
  METAL OXIDE: Metal oxide-film resistor.
  F:nonflammable
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- SEMICONDUCTORS
  In each case, u:μ, for example:
  uA..: μA.. uPA..: μPA..
  uPB..: μPB.. uPC..: μPC.. uPD..: μPD..
- CAPACITORS
  uF: μF
- COILS
  uH: μH
- **Abbreviations**
  IT:Italian JE:Tourist
  G:German SP:Singapore

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.

When indicating parts by reference number, please include the board.

Ref. No.	Part No.	Description			Remark
*	A-2007-173-A	DOLBY (S) BOARD, COMPLETE			
		**********			
		< CAPACITOR >			
C1	1-164-222-11	CERAMIC CHIP	0.22uF		25V
C2	1-135-177-21	TANTALUM CHIP	1uF	20%	20V
C3	1-104-558-11	FILM CHIP	0.039uF	5%	16V
C4	1-163-007-11	CERAMIC CHIP	680PF	10%	50V
C5	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C6	1-164-717-11	CERAMIC CHIP	0.0082uF	5%	50V
C7	1-164-222-11	CERAMIC CHIP	0.22uF		25V
C8	1-104-562-11	FILM CHIP	0.082uF	5%	16V
C9	1-104-553-11	FILM CHIP	0.015uF	5%	16V
C10	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C11	1-135-145-11	TANTALUM CHIP	0.47uF	10%	35V
C12	1-164-222-11	CERAMIC CHIP	0.22uF		25V
C13	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C14	1-162-568-11	CERAMIC CHIP	0.33uF	10%	16V
C15	1-104-562-11	FILM CHIP	0.082uF	5%	16V
C16	1-135-145-11	TANTALUM CHIP	0.47uF	10%	35V
C17	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C18	1-164-222-11	CERAMIC CHIP	0.22uF		25V
C19	1-163-035-00	CERAMIC CHIP	0.047uF		50V
C20	1-104-553-11	FILM CHIP	0.015uF	5%	16V
C21	1-164-717-11	CERAMIC CHIP	0.0082uF	5%	50V
C22	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C23	1-164-161-11	CERAMIC CHIP	0.0022uF	10%	100V
C24	1-163-005-11	CERAMIC CHIP	470PF	10%	50V
C25	1-163-012-00	CERAMIC CHIP	0.0018uF	10%	50V
C26	1-104-558-11	FILM CHIP	0.039uF	5%	16V
C27	1-163-012-00	CERAMIC CHIP	0.0018uF	10%	50V
C28	1-163-012-00	CERAMIC CHIP	0.0018uF	10%	50V
C29	1-104-563-11	FILM CHIP	0.1uF	5%	16V
C30	1-135-145-11	TANTALUM CHIP	0.47uF	10%	35V
C31	1-104-555-11	FILM CHIP	0.022uF	5%	16V
C32	1-104-563-11	FILM CHIP	0.1uF	5%	16V
C33	1-163-024-00	CERAMIC CHIP	0.018uF	10%	50V
C34	1-104-563-11	FILM CHIP	0.1uF	5%	16V
C35	1-163-012-00	CERAMIC CHIP	0.0018uF	10%	50V
C36	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C37	1-164-222-11	CERAMIC CHIP	0.22uF		25V
C38	1-163-024-00	CERAMIC CHIP	0.018uF	10%	50V
C39	1-104-555-11	FILM CHIP	0.022uF	5%	16V
C40	1-104-563-11	FILM CHIP	0.1uF	5%	16V
		< CONNECTOR >			
CN1	1-695-092-11	SOCKET, CONNECTOR 7P			
		< IC >			
IC1	8-752-056-51	IC CXA1417Q			
		< RESISTOR >			
R1	1-216-615-11	METAL CHIP	33	0.5%	1/10W
R2	1-216-675-11	METAL CHIP	10K	0.5%	1/10W
R3	1-208-812-11	METAL GLAZE	18K	2%	1/10W
R4	1-216-119-00	METAL CHIP	820K	5%	1/10W
R5	1-208-799-11	METAL GLAZE	5.1K	2%	1/10W
R6	1-208-787-11	METAL GLAZE	1.6K	2%	1/10W
R7	1-216-657-11	METAL CHIP	1.8K	0.5%	1/10W
R8	1-216-667-11	METAL CHIP	4.7K	0.5%	1/10W
R9	1-208-791-11	METAL GLAZE	2.4K	2%	1/10W
R10	1-216-052-00	METAL CHIP	1.3K	5%	1/10W
R11	1-216-615-11	METAL CHIP	33	0.5%	1/10W
R12	1-216-619-11	METAL CHIP	47	0.5%	1/10W
R13	1-208-784-11	METAL GLAZE	1.2K	2%	1/10W
R14	1-216-667-11	METAL CHIP	4.7K	0.5%	1/10W
R15	1-208-791-11	METAL GLAZE	2.4K	2%	1/10W
R16	1-216-615-11	METAL CHIP	33	0.5%	1/10W
R17	1-216-619-11	METAL CHIP	47	0.5%	1/10W
R18	1-216-657-11	METAL CHIP	1.8K	0.5%	1/10W
R19	1-208-787-11	METAL GLAZE	1.6K	2%	1/10W
R20	1-208-799-11	METAL GLAZE	5.1K	2%	1/10W
R21	1-216-119-00	METAL CHIP	820K	5%	1/10W
R22	1-216-655-11	METAL CHIP	1.5K	0.5%	1/10W
R23	1-216-678-11	METAL CHIP	13K	0.5%	1/10W
R24	1-216-673-11	METAL CHIP	8.2K	0.5%	1/10W
R25	1-216-675-11	METAL CHIP	10K	0.5%	1/10W
R26	1-216-676-11	METAL CHIP	11K	0.5%	1/10W

Ref. No.	Part No.	Description			Remark
R27	1-208-799-11	METAL GLAZE	5.1K	2%	1/10W
R28	1-216-695-11	METAL CHIP	68K	0.5%	1/10W
R29	1-208-799-11	METAL GLAZE	5.1K	2%	1/10W
R30	1-208-791-11	METAL GLAZE	2.4K	2%	1/10W
R31	1-208-811-11	METAL GLAZE	16K	2%	1/10W
R32	1-216-685-11	METAL CHIP	27K	0.5%	1/10W
R33	1-208-813-11	METAL GLAZE	20K	2%	1/10W
R34	1-216-684-11	METAL CHIP	24K	0.5%	1/10W
R35	1-208-817-11	METAL GLAZE	30K	2%	1/10W
R36	1-208-817-11	METAL GLAZE	30K	2%	1/10W
R37	1-216-676-11	METAL CHIP	11K	0.5%	1/10W
R38	1-208-819-11	METAL GLAZE	36K	2%	1/10W
R39	1-208-799-11	METAL GLAZE	5.1K	2%	1/10W
R40	1-208-817-11	METAL GLAZE	30K	2%	1/10W
R41	1-208-811-11	METAL GLAZE	16K	2%	1/10W
R42	1-216-673-11	METAL CHIP	8.2K	0.5%	1/10W
R43	1-216-676-11	METAL CHIP	11K	0.5%	1/10W
R44	1-216-689-11	METAL CHIP	39K	0.5%	1/10W
R45	1-216-689-11	METAL CHIP	39K	0.5%	1/10W
**********					
*	A-2007-270-A	MAIN BOARD, COMPLETE			
		**********			
*	3-309-144-21	HEAT SINK			
	7-685-871-01	SCREW +BVTT 3X6 (S)			
		< CAPACITOR >			
C101	1-136-157-00	FILM	0.022uF	5%	50V
C103	1-162-302-11	CERAMIC	0.0022uF	30%	16V
C104	1-136-165-00	FILM	0.1uF	5%	50V
C105	1-136-163-00	FILM	0.068uF	5%	50V
C106	1-126-059-11	ELECT	10uF	20%	50V
C107	1-126-514-11	ELECT	22uF	20%	10V
C108	1-126-096-11	ELECT	10uF	20%	35V
C111	1-126-059-11	ELECT	10uF	20%	50V
C121	1-126-096-11	ELECT	10uF	20%	35V
C201	1-136-157-00	FILM	0.022uF	5%	50V
C203	1-162-302-11	CERAMIC	0.0022uF	30%	16V
C204	1-136-165-00	FILM	0.1uF	5%	50V
C205	1-136-163-00	FILM	0.068uF	5%	50V
C206	1-126-059-11	ELECT	10uF	20%	50V
C207	1-126-514-11	ELECT	22uF	20%	10V
C208	1-126-096-11	ELECT	10uF	20%	35V
C211	1-126-059-11	ELECT	10uF	20%	50V
C221	1-126-096-11	ELECT	10uF	20%	35V
C301	1-126-059-11	ELECT	10uF	20%	50V
C302	1-126-059-11	ELECT	10uF	20%	50V
C303	1-126-096-11	ELECT	10uF	20%	35V
C304	1-126-096-11	ELECT	10uF	20%	35V

Ref. No.	Part No.	Description			Remark
C601	1-126-103-11	ELECT	470uF	20%	16V
C602	1-126-022-11	ELECT	47uF	20%	25V
C603	1-126-058-11	ELECT	4.7uF	20%	25V
C611	1-126-103-11	ELECT	470uF	20%	16V
C621	1-126-935-11	ELECT	470uF	20%	6.3V
C622	1-126-768-11	ELECT	2200uF	20%	16V
C625	1-164-159-11	CERAMIC	0.1uF		50V
C641	1-126-935-11	ELECT	470uF	20%	16V
C642	1-126-096-11	ELECT	10uF	20%	35V
C643	1-124-927-11	ELECT	4.7uF	20%	100V
C651	1-164-159-11	CERAMIC	0.1uF		50V
C701	1-126-916-11	ELECT	1000uF	20%	6.3V
C703	1-164-159-11	CERAMIC	0.1uF		50V
C705	1-164-159-11	CERAMIC	0.1uF		50V
C706	1-126-096-11	ELECT	10uF	20%	35V
C711	1-124-257-00	ELECT	2.2uF	20%	50V
C712	1-124-257-00	ELECT	2.2uF	20%	50V
C721	1-162-302-11	CERAMIC	0.0022uF	30%	16V
C751	1-126-935-11	ELECT	470uF	20%	16V
C752	1-164-159-11	CERAMIC	0.1uF		50V
C753	1-164-159-11	CERAMIC	0.1uF		50V
C762	1-162-282-31	CERAMIC	100PF	10%	50V
C771	1-161-494-00	CERAMIC	0.022uF		25V
C781	1-161-494-00	CERAMIC	0.022uF		25V
		< CONNECTOR >			
CN101	1-695-087-11	PIN, CONNECTOR (PC BOARD) 7P			
CN201	1-695-087-11	PIN, CONNECTOR (PC BOARD) 7P			
CN301	1-691-170-11	PIN, CONNECTOR 13P			
CN303	1-691-169-11	PIN, CONNECTOR 12P			
CN304	1-691-167-11	PIN, CONNECTOR 10P			
* CN601	1-568-832-11	SOCKET, CONNECTOR 13P			
* CN701	1-568-842-11	SOCKET, CONNECTOR 27P			
* CN702	1-564-717-11	PIN, CONNECTOR (SMALL TYPE)15P			
CN703	1-564-707-11	PIN, CONNECTOR (SMALL TYPE) 5P			
* CN704	1-565-561-11	PIN, CONNECTOR 3P (AU BUS)			
		< CONPOSITION CIRCUIT BLOCK >			
CP702	1-233-125-11	COMPOSITION CIRCUIT BLOCK (10kX4)			
		< DIODE >			
D121	8-719-987-63	DIODE 1N4148M			
D122	8-719-987-63	DIODE 1N4148M			
D221	8-719-987-63	DIODE 1N4148M			
D222	8-719-987-63	DIODE 1N4148M			
D301	8-719-987-63	DIODE 1N4148M			
D302	8-719-987-63	DIODE 1N4148M			
D303	8-719-987-63	DIODE 1N4148M			

MAIN

Ref. No.	Part No.	Description	Remark
D304	8-719-987-63	DIODE 1N4148M	
D352	8-719-933-33	DIODE HZS6A1L	(NEW TYPE)
D611	8-719-933-33	DIODE HZS6A1L	
D621	8-719-200-82	DIODE 11ES2	
D634	8-719-987-63	DIODE 1N4148M	
D641	8-719-987-63	DIODE 1N4148M	
D651	8-719-933-33	DIODE HZS6A1L	(FORMER TYPE)
D652	8-719-933-33	DIODE HZS6A1L	
D711	8-719-933-33	DIODE HZS6A1L	
D712	8-719-933-33	DIODE HZS6A1L	
D713	8-719-987-63	DIODE 1N4148M	
D721	8-719-987-63	DIODE 1N4148M	
D722	8-719-987-63	DIODE 1N4148M	
D723	8-719-987-63	DIODE 1N4148M	
D724	8-719-987-63	DIODE 1N4148M	
D725	8-719-987-63	DIODE 1N4148M	
D732	8-719-987-63	DIODE 1N4148M	
D733	8-719-987-63	DIODE 1N4148M	
D751	8-719-109-85	DIODE RD5.1ES-B2	
D761	8-719-933-33	DIODE HZS6A1L	
		< COIL >	
FB001	1-412-473-21	INDUCTOR 0uH	(NEW TYPE)
		< IC >	
IC301	8-752-066-35	IC CXA1563S	
IC302	8-759-603-52	IC M5228P	
IC601	8-759-634-51	IC M5218AP	
IC602	8-759-604-35	IC M5F78M05L	
IC603	8-759-802-23	IC L780S12	
IC701	8-759-284-51	IC M38172M4-102FP	
IC702	8-759-635-63	IC M51943BSL	
IC703	8-759-188-67	IC X24C01P-S	
IC704	8-759-925-74	IC SN74HC04ANS	
IC705	8-759-009-06	IC MC14052BF	
IC706	8-759-802-76	IC LB1645N	
		< JACK >	
J301	1-565-258-11	JACK, PIN 4P (LINE IN/LINE OUT)	
		< COIL >	
L701	1-410-517-11	INDUCTOR, MICRO 47uH	(FORMER TYPE)
		< LOW PASS FILTER >	
LPF101	1-231-388-00	FILTER, LOW PASS	
LPF201	1-231-388-00	FILTER, LOW PASS	

Ref. No.	Part No.	Description	Remark
		< IC LINK >	
⚠PS601	1-532-835-21	LINK, IC PRF400 (0.4A)	
		< TRANSISTOR >	
Q101	8-729-900-80	TRANSISTOR DTC114ES	
Q102	8-729-900-80	TRANSISTOR DTC114ES	
Q103	8-729-900-74	TRANSISTOR DTC143TS	
Q104	8-729-900-74	TRANSISTOR DTC143TS	
Q121	8-729-900-74	TRANSISTOR DTC143TS	
Q201	8-729-900-80	TRANSISTOR DTC114ES	
Q202	8-729-900-80	TRANSISTOR DTC114ES	
Q203	8-729-900-74	TRANSISTOR DTC143TS	
Q204	8-729-900-74	TRANSISTOR DTC143TS	
Q221	8-729-900-74	TRANSISTOR DTC143TS	
Q601	8-729-141-83	TRANSISTOR 2SB1094-LK	
Q602	8-729-209-15	TRANSISTOR 2SD2012	
Q621	8-729-900-65	TRANSISTOR DTA144ES	
Q622	8-729-900-89	TRANSISTOR DTC144ES	
Q641	8-729-900-80	TRANSISTOR DTC114ES	
Q721	8-729-620-05	TRANSISTOR 2SC2603-EF	
Q722	8-729-900-65	TRANSISTOR DTA144ES	
Q732	8-729-900-65	TRANSISTOR DTA144ES	
Q733	8-729-900-65	TRANSISTOR DTA144ES	
Q734	8-729-900-65	TRANSISTOR DTA144ES	
Q735	8-729-900-65	TRANSISTOR DTA144ES	
Q736	8-729-900-65	TRANSISTOR DTA144ES	
Q737	8-729-900-65	TRANSISTOR DTA144ES	
Q738	8-729-900-65	TRANSISTOR DTA144ES	
Q739	8-729-900-65	TRANSISTOR DTA144ES	
Q763	8-729-801-94	TRANSISTOR 2SD1387-4	
Q764	8-729-801-94	TRANSISTOR 2SD1387-4	
		< RESISTOR >	
R101	1-249-429-11	CARBON 10K 5% 1/4W	
R102	1-259-436-11	CARBON 2.2K 5% 1/6W	
R103	1-259-440-11	CARBON 3.3K 5% 1/6W	
R105	1-249-428-11	CARBON 8.2K 5% 1/4W	
R106	1-259-440-11	CARBON 3.3K 5% 1/6W	
R111	1-259-428-11	CARBON 1K 5% 1/6W	
R112	1-249-437-11	CARBON 47K 5% 1/4W	
R113	1-259-430-11	CARBON 1.2K 5% 1/6W	
R114	1-259-428-11	CARBON 1K 5% 1/6W	
R117	1-247-887-00	CARBON 220K 5% 1/4W	
R121	1-249-437-11	CARBON 47K 5% 1/4W	
R122	1-247-822-11	CARBON 430 5% 1/4W	
R123	1-249-425-11	CARBON 4.7K 5% 1/4W	
R124	1-247-866-11	CARBON 30K 5% 1/4W	
R125	1-247-866-11	CARBON 30K 5% 1/4W	

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.

Ref. No.	Part No.	Description				Remark
R126	1-249-439-11	CARBON	68K	5%	1/4W	
R127	1-249-410-11	CARBON	270	5%	1/4W	
R201	1-249-429-11	CARBON	10K	5%	1/4W	
R202	1-259-436-11	CARBON	2.2K	5%	1/6W	
R203	1-259-440-11	CARBON	3.3K	5%	1/6W	
R205	1-249-428-11	CARBON	8.2K	5%	1/4W	
R206	1-259-440-11	CARBON	3.3K	5%	1/6W	
R211	1-259-428-11	CARBON	1K	5%	1/6W	
R212	1-249-437-11	CARBON	47K	5%	1/4W	
R213	1-259-430-11	CARBON	1.2K	5%	1/6W	
R214	1-259-428-11	CARBON	1K	5%	1/6W	
R217	1-247-887-00	CARBON	220K	5%	1/4W	
R221	1-249-437-11	CARBON	47K	5%	1/4W	
R222	1-247-822-11	CARBON	430	5%	1/4W	
R223	1-249-425-11	CARBON	4.7K	5%	1/4W	
R224	1-247-866-11	CARBON	30K	5%	1/4W	
R225	1-247-866-11	CARBON	30K	5%	1/4W	
R226	1-249-439-11	CARBON	68K	5%	1/4W	
R227	1-249-410-11	CARBON	270	5%	1/4W	
R301	1-215-452-00	METAL	20K	1%	1/6W	
R302	1-249-429-11	CARBON	10K	5%	1/4W	
R303	1-249-429-11	CARBON	10K	5%	1/4W	
R304	1-249-429-11	CARBON	10K	5%	1/4W	
R321	1-247-885-00	CARBON	180K	5%	1/4W	
R322	1-249-441-11	CARBON	100K	5%	1/4W	
R601	1-215-445-00	METAL	10K	1%	1/6W	
R602	1-215-425-00	METAL	1.5K	1%	1/6W	
R603	1-215-426-00	METAL	1.6K	1%	1/6W	
R604	1-215-441-00	METAL	6.8K	1%	1/6W	
R606	1-249-425-11	CARBON	4.7K	5%	1/4W	
⚠R607	1-219-137-11	FUSIBLE	0.33	10%	1/4W	F
R612	1-215-441-00	METAL	6.8K	1%	1/6W	
R613	1-215-441-00	METAL	6.8K	1%	1/6W	
R614	1-249-417-11	CARBON	1K	5%	1/4W	
R615	1-249-409-11	CARBON	220	5%	1/4W	
R616	1-249-425-11	CARBON	4.7K	5%	1/4W	
R641	1-249-433-11	CARBON	22K	5%	1/4W	
R642	1-249-441-11	CARBON	100K	5%	1/4W	
R643	1-249-429-11	CARBON	10K	5%	1/4W	
R644	1-249-429-11	CARBON	10K	5%	1/4W	
R701	1-249-439-11	CARBON	68K	5%	1/4W	
R702	1-249-429-11	CARBON	10K	5%	1/4W	
R703	1-249-429-11	CARBON	10K	5%	1/4W	
R704	1-249-425-11	CARBON	4.7K	5%	1/4W	
R705	1-249-425-11	CARBON	4.7K	5%	1/4W	
R706	1-249-425-11	CARBON	4.7K	5%	1/4W	
R707	1-249-425-11	CARBON	4.7K	5%	1/4W	
R708	1-249-425-11	CARBON	4.7K	5%	1/4W	
R710	1-249-429-11	CARBON	10K	5%	1/4W	

Ref. No.	Part No.	Description				Remark
R711	1-247-807-31	CARBON	100	5%	1/4W	
R712	1-247-807-31	CARBON	100	5%	1/4W	
R713	1-247-866-11	CARBON	30K	5%	1/4W	
R714	1-249-431-11	CARBON	15K	5%	1/4W	
R715	1-247-852-11	CARBON	7.5K	5%	1/4W	
R716	1-247-866-11	CARBON	30K	5%	1/4W	
R717	1-249-431-11	CARBON	15K	5%	1/4W	
R718	1-247-852-11	CARBON	7.5K	5%	1/4W	
R719	1-247-862-11	CARBON	20K	5%	1/4W	
R721	1-249-429-11	CARBON	10K	5%	1/4W	
R722	1-249-417-11	CARBON	1K	5%	1/4W	
R723	1-249-429-11	CARBON	10K	5%	1/4W	
R724	1-249-393-11	CARBON	10	5%	1/4W	
R725	1-249-429-11	CARBON	10K	5%	1/4W	
R731	1-249-437-11	CARBON	47K	5%	1/4W	
R733	1-249-437-11	CARBON	47K	5%	1/4W	
R734	1-249-425-11	CARBON	4.7K	5%	1/4W	
R735	1-249-425-11	CARBON	4.7K	5%	1/4W	
R741	1-249-429-11	CARBON	10K	5%	1/4W	
R742	1-249-429-11	CARBON	10K	5%	1/4W	
R744	1-249-437-11	CARBON	47K	5%	1/4W	
R745	1-249-437-11	CARBON	47K	5%	1/4W	
R746	1-249-437-11	CARBON	47K	5%	1/4W	
R747	1-247-807-31	CARBON	100	5%	1/4W	
R748	1-247-807-31	CARBON	100	5%	1/4W	
⚠R751	1-212-958-00	FUSIBLE	10	5%	1/2W	F
R761	1-249-415-11	CARBON	680	5%	1/4W	
R762	1-249-441-11	CARBON	100K	5%	1/4W	
R763	1-249-415-11	CARBON	680	5%	1/4W	
R764	1-249-441-11	CARBON	100K	5%	1/4W	
R765	1-249-436-11	CARBON	39K	5%	1/4W	
R767	1-249-420-11	CARBON	1.8K	5%	1/4W	
R768	1-249-417-11	CARBON	1K	5%	1/4W	
R771	1-249-434-11	CARBON	27K	5%	1/4W	
R772	1-249-434-11	CARBON	27K	5%	1/4W	
R773	1-249-434-11	CARBON	27K	5%	1/4W	
R774	1-249-434-11	CARBON	27K	5%	1/4W	
R775	1-249-421-11	CARBON	2.2K	5%	1/4W	
R776	1-247-874-11	CARBON	62K	5%	1/4W	
R777	1-247-866-11	CARBON	30K	5%	1/4W	
R778	1-249-431-11	CARBON	15K	5%	1/4W	
R779	1-247-852-11	CARBON	7.5K	5%	1/4W	
R780	1-247-860-11	CARBON	16K	5%	1/4W	
R781	1-249-393-11	CARBON	10	5%	1/4W	
R782	1-247-842-11	CARBON	3K	5%	1/4W	
R783	1-249-429-11	CARBON	10K	5%	1/4W	
R952	1-249-429-11	CARBON	10K	5%	1/4W	

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Replace only with part number specified.

MAIN **MECH** **PANEL** **POWER**

Ref.No.	Part No.	Description	Remark
		< VARIABLE RESISTOR >	
RV701	1-238-598-11	RES, ADJ, CARBON 2.2K	
		< TEST PIN >	
* TP701	1-564-505-11	PLUG, CONNECTOR 2P	
		< VIBRATOR >	
X701	1-577-358-21	VIBRATOR, CERAMIC (4MHz)	
**********			
*	1-653-898-11	MECH BOARD	
		**********	
		< CONNECTOR >	
CN901	1-766-700-11	SOCKET, CONNECTOR 15P	
		< PHOTO REFLECTOR >	
PH901	1-810-741-11	PHOTO REFLECTOR NJL5165K	
		< RESISTOR >	
R901	1-249-419-11	CARBON 1.5K 5% 1/4W	
		< SWITCH >	
S902	1-762-114-11	SWITCH, LEAF (FWD REC (ERASE PROOF) DET)	
S903	1-572-335-11	SWITCH, LEAF (CrO2 DET)	
S904	1-762-114-11	SWITCH, LEAF (REV REC (ERASE PROOF) DET)	
S905	1-572-335-11	SWITCH, LEAF (CASSETTE PACK (HALF) DET)	
S906	1-572-335-11	SWITCH, LEAF (METAL DET)	
S907	1-762-113-11	SWITCH, LEAF (PLAY/STOP DET)	
**********			
*	1-653-575-11	PANEL BOARD	
		**********	
*	3-916-799-01	HOLDER (FL)	
		< CONNECTOR >	
* CN302	1-568-824-11	SOCKET, CONNECTOR 5P	
* CN901	1-568-869-11	SOCKET, CONNECTOR 27P	
		< FLUORESCENT INDICATOR TUBE >	
FL901	1-517-317-11	INDICATOR TUBE, FLUORESCENT	
		< RESISTOR >	
R901	1-249-418-11	CARBON 1.2K 5% 1/4W	
R902	1-249-420-11	CARBON 1.8K 5% 1/4W	
R903	1-249-422-11	CARBON 2.7K 5% 1/4W	
R904	1-249-424-11	CARBON 3.9K 5% 1/4W	
R905	1-249-427-11	CARBON 6.8K 5% 1/4W	
R907	1-249-431-11	CARBON 15K 5% 1/4W	
R911	1-249-418-11	CARBON 1.2K 5% 1/4W	
R912	1-249-420-11	CARBON 1.8K 5% 1/4W	
R913	1-249-422-11	CARBON 2.7K 5% 1/4W	
R914	1-249-424-11	CARBON 3.9K 5% 1/4W	
R915	1-249-427-11	CARBON 6.8K 5% 1/4W	
R916	1-249-431-11	CARBON 15K 5% 1/4W	
R917	1-249-437-11	CARBON 47K 5% 1/4W	
		< VARIABLE RESISTOR >	
RV301	1-241-820-11	RES, VAR, CARBON 50K/50K (REC LEVEL)	
		< SWITCH >	
S901	1-554-303-21	SWITCH, TACTILE (⏏ OPEN/CLOSE)	
S902	1-554-303-21	SWITCH, TACTILE (■)	
S903	1-554-303-21	SWITCH, TACTILE (❚❚ PAUSE)	
S904	1-554-303-21	SWITCH, TACTILE (▷)	
S905	1-554-303-21	SWITCH, TACTILE (◁)	
S906	1-554-303-21	SWITCH, TACTILE (DIRECTION)	
S907	1-554-303-21	SWITCH, TACTILE (DOLBY NR)	
S911	1-554-303-21	SWITCH, TACTILE (AMS ▶▶)	
S912	1-554-303-21	SWITCH, TACTILE (AMS ◀◀)	
S913	1-554-303-21	SWITCH, TACTILE (● REC)	
S914	1-554-303-21	SWITCH, TACTILE (RESET)	
S915	1-554-303-21	SWITCH, TACTILE (MEMORY)	
S916	1-554-303-21	SWITCH, TACTILE (REC CAL)	
S917	1-571-296-11	SWITCH, SLIDE (TIMER)	
S918	1-554-118-00	SWITCH, PUSH (1 KEY) (POWER)	
**********			
*	1-653-576-11	POWER BOARD	
		**********	
*	1-533-213-31	HOLDER, FUSE	(FORMER TYPE)
	1-533-293-11	HOLDER, FUSE	(NEW TYPE)
		< CAPACITOR >	
⚠C401	1-161-744-51	CERAMIC 0.01uF	400V
C501	1-126-234-11	ELECT 2200uF 20%	16V
C502	1-126-234-11	ELECT 2200uF 20%	16V
C503	1-104-667-91	ELECT 22uF 20%	35V
C504	1-126-943-11	ELECT 2200uF 20%	25V
C516	1-164-159-11	CERAMIC 0.1uF	50V
C520	1-104-666-11	ELECT 220uF 20%	25V
C521	1-104-666-11	ELECT 220uF 20%	25V
C522	1-124-927-11	ELECT 4.7uF 20%	100V
C523	1-124-122-11	ELECT 100uF 20%	50V

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Ref. No.	Part No.	Description				Remark
C531	1-164-159-11	CERAMIC	0.1uF			50V
		< CONNECTOR >				
CN402	1-580-230-11	PIN, CONNECTOR (PC BOARD) 3P				
CN403	1-564-321-00	PIN, CONNECTOR 2P				
* CN404	1-580-633-11	PIN, CONNECTOR 5P				(SP, JE)
* CN501	1-568-856-11	SOCKET, CONNECTOR 13P				
* CN502	1-564-495-11	PIN, CONNECTOR 2P				
		< DIODE >				
D501	8-719-200-82	DIODE	11ES2			
D502	8-719-200-82	DIODE	11ES2			
D503	8-719-200-82	DIODE	11ES2			
D504	8-719-200-82	DIODE	11ES2			
D505	8-719-933-33	DIODE	HZS6A1L			
D506	8-719-200-82	DIODE	11ES2			
D507	8-719-200-82	DIODE	11ES2			
D508	8-719-312-09	DIODE	RBA-402			
D521	8-719-200-82	DIODE	11ES2			
D522	8-719-200-82	DIODE	11ES2			
D531	8-719-933-33	DIODE	HZS6A1L			
		< FUSE >				
⚠F401	1-532-259-00	FUSE, TIME-LAG (1.6A/250V)				
		< TRANSISTOR >				
Q501	8-729-119-76	TRANSISTOR	2SA1175-HFE			
Q502	8-729-118-01	TRANSISTOR	2SB1116-K			
		< RESISTOR >				
R501	1-249-421-11	CARBON	2.2K	5%	1/4W	
R502	1-249-417-11	CARBON	1K	5%	1/4W	
R521	1-249-429-11	CARBON	10K	5%	1/4W	
R522	1-249-436-11	CARBON	39K	5%	1/4W	
R523	1-249-433-11	CARBON	22K	5%	1/4W	
R531	1-249-437-11	CARBON	47K	5%	1/4W	
		< TRANSFORMER >				
⚠T501	1-426-815-11	TRANSFORMER, POWER				(AEP, IT, G, UK, SP)
⚠T501	1-426-816-11	TRANSFORMER, POWER				(JE)
**********						
*	A-2007-258-A	SUB (A) BOARD, COMPLETE				
		**********				
		< CAPACITOR >				
C141	1-126-059-11	ELECT	10uF	20%	50V	
C142	1-126-059-11	ELECT	10uF	20%	50V	

Ref. No.	Part No.	Description				Remark
C172	1-126-044-11	ELECT	1uF	20%	50V	
C173	1-126-059-11	ELECT	10uF	20%	50V	
C241	1-126-059-11	ELECT	10uF	20%	50V	
C242	1-126-059-11	ELECT	10uF	20%	50V	
C272	1-126-044-11	ELECT	1uF	20%	50V	
C273	1-126-059-11	ELECT	10uF	20%	50V	
C321	1-137-370-11	FILM	0.01uF	5%	50V	
C322	1-137-370-11	FILM	0.01uF	5%	50V	
C332	1-137-367-11	FILM	0.0033uF	5%	50V	
C333	1-136-164-00	FILM	0.082uF	5%	50V	
C334	1-136-161-00	FILM	0.047uF	5%	50V	
C342	1-162-282-31	CERAMIC	100PF	10%	50V	
C343	1-161-494-00	CERAMIC	0.022uF		25V	
C344	1-162-217-31	CERAMIC	56PF	5%	50V	
C345	1-124-257-00	ELECT	2.2uF	20%	50V	
C346	1-124-257-00	ELECT	2.2uF	20%	50V	
C371	1-137-370-11	FILM	0.01uF	5%	50V	
C372	1-137-370-11	FILM	0.01uF	5%	50V	
C373	1-124-465-00	ELECT	0.47uF	20%	50V	
C374	1-161-494-00	CERAMIC	0.022uF		25V	
C375	1-124-465-00	ELECT	0.47uF	20%	50V	
C376	1-124-465-00	ELECT	0.47uF	20%	50V	
		< CONNECTOR >				
* CN351	1-691-183-11	CONNECTOR (BOARD TO BOARD) 13P				
* CN352	1-568-824-11	SOCKET, CONNECTOR 5P				
* CN354	1-691-180-11	CONNECTOR (BOARD TO BOARD) 10P				
		< DIODE >				
D331	8-719-987-63	DIODE	1N4148M			
D332	8-719-987-63	DIODE	1N4148M			
D341	8-719-987-63	DIODE	1N4148M			
		< IC >				
IC303	8-759-711-35	IC	NJM4580D			
IC305	8-759-603-52	IC	M5228P			
IC308	8-752-060-64	IC	CXA1198AP			
IC309	8-759-000-48	IC	MC14052BCP			
		< TRANSISTOR >				
Q172	8-729-142-25	TRANSISTOR	2SD1020-HFE			
Q272	8-729-142-25	TRANSISTOR	2SD1020-HFE			
Q331	8-729-900-74	TRANSISTOR	DTC143TS			
Q332	8-729-900-74	TRANSISTOR	DTC143TS			
Q333	8-729-119-76	TRANSISTOR	2SA1175-HFE			
		< RESISTOR >				
R11	1-249-435-11	CARBON	33K	5%	1/4W	
R12	1-247-868-11	CARBON	36K	5%	1/4W	

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.

SUB (A)

Ref.No.	Part No.	Description				Remark
R13	1-247-874-11	CARBON	62K	5%	1/4W	
R14	1-249-439-11	CARBON	68K	5%	1/4W	(FORMER TYPE)
R14	1-215-465-00	METAL	68K	1%	1/4W	(NEW TYPE)
R15	1-247-880-11	CARBON	110K	5%	1/4W	(FORMER TYPE)
R15	1-215-470-00	METAL	110K	1%	1/4W	(NEW TYPE)
R16	1-247-878-00	CARBON	91K	5%	1/4W	
R21	1-249-437-11	CARBON	47K	5%	1/4W	
R22	1-249-438-11	CARBON	56K	5%	1/4W	
R23	1-247-885-00	CARBON	180K	5%	1/4W	
R24	1-249-439-11	CARBON	68K	5%	1/4W	(FORMER TYPE)
R24	1-215-465-00	METAL	68K	1%	1/4W	(NEW TYPE)
R25	1-249-440-11	CARBON	82K	5%	1/4W	(FORMER TYPE)
R25	1-215-467-00	METAL	82K	1%	1/4W	(NEW TYPE)
R26	1-247-881-00	CARBON	120K	5%	1/4W	
R41	1-249-438-11	CARBON	56K	5%	1/4W	
R42	1-247-876-11	CARBON	75K	5%	1/4W	
R43	1-249-440-11	CARBON	82K	5%	1/4W	
R44	1-249-439-11	CARBON	68K	5%	1/4W	(FORMER TYPE)
R44	1-215-465-00	METAL	68K	1%	1/4W	(NEW TYPE)
R45	1-249-439-11	CARBON	68K	5%	1/4W	(FORMER TYPE)
R45	1-215-465-00	METAL	68K	1%	1/4W	(NEW TYPE)
R46	1-249-441-11	CARBON	100K	5%	1/4W	
R47	1-249-441-11	CARBON	100K	5%	1/4W	
R139	1-249-429-11	CARBON	10K	5%	1/4W	
R140	1-249-433-11	CARBON	22K	5%	1/4W	
R141	1-249-441-11	CARBON	100K	5%	1/4W	
R142	1-249-425-11	CARBON	4.7K	5%	1/4W	
R143	1-249-429-11	CARBON	10K	5%	1/4W	
R171	1-249-428-11	CARBON	8.2K	5%	1/4W	
R173	1-249-421-11	CARBON	2.2K	5%	1/4W	
R174	1-249-423-11	CARBON	3.3K	5%	1/4W	
R175	1-249-421-11	CARBON	2.2K	5%	1/4W	
R176	1-249-429-11	CARBON	10K	5%	1/4W	
R239	1-249-429-11	CARBON	10K	5%	1/4W	
R240	1-249-433-11	CARBON	22K	5%	1/4W	
R241	1-249-441-11	CARBON	100K	5%	1/4W	
R242	1-249-422-11	CARBON	2.7K	5%	1/4W	
R243	1-249-429-11	CARBON	10K	5%	1/4W	
R271	1-249-428-11	CARBON	8.2K	5%	1/4W	
R273	1-249-421-11	CARBON	2.2K	5%	1/4W	
R274	1-249-423-11	CARBON	3.3K	5%	1/4W	
R275	1-249-421-11	CARBON	2.2K	5%	1/4W	
R276	1-249-429-11	CARBON	10K	5%	1/4W	
R331	1-249-425-11	CARBON	4.7K	5%	1/4W	
R332	1-249-433-11	CARBON	22K	5%	1/4W	
R333	1-249-436-11	CARBON	39K	5%	1/4W	
R334	1-249-441-11	CARBON	100K	5%	1/4W	(FORMER TYPE)
R334	1-215-471-00	METAL	120K	1%	1/4W	(NEW TYPE)
R335	1-249-441-11	CARBON	100K	5%	1/4W	(FORMER TYPE)
R335	1-215-469-00	METAL	100K	1%	1/4W	(NEW TYPE)
R336	1-249-423-11	CARBON	3.3K	5%	1/4W	(FORMER TYPE)
R336	1-215-433-00	METAL	3.3K	1%	1/4W	(NEW TYPE)
R341	1-249-437-11	CARBON	47K	5%	1/4W	
R342	1-249-427-11	CARBON	6.8K	5%	1/4W	
R343	1-249-423-11	CARBON	3.3K	5%	1/4W	
R344	1-249-435-11	CARBON	33K	5%	1/4W	
R345	1-249-429-11	CARBON	10K	5%	1/4W	
R346	1-249-441-11	CARBON	100K	5%	1/4W	
R347	1-249-417-11	CARBON	1K	5%	1/4W	
R348	1-249-432-11	CARBON	18K	5%	1/4W	
R349	1-249-436-11	CARBON	39K	5%	1/4W	
R371	1-247-864-11	CARBON	24K	5%	1/4W	(FORMER TYPE)
R371	1-215-454-00	METAL	24K	1%	1/4W	(NEW TYPE)
R372	1-247-870-11	CARBON	43K	5%	1/4W	(FORMER TYPE)
R372	1-215-457-00	METAL	33K	1%	1/4W	(NEW TYPE)
R373	1-249-420-11	CARBON	1.8K	5%	1/4W	(FORMER TYPE)
R373	1-215-427-00	METAL	1.8K	1%	1/4W	(NEW TYPE)
R375	1-249-423-11	CARBON	3.3K	5%	1/4W	(FORMER TYPE)
R375	1-215-433-00	METAL	3.3K	1%	1/4W	(NEW TYPE)
R376	1-249-441-11	CARBON	100K	5%	1/4W	
R377	1-249-417-11	CARBON	1K	5%	1/4W	

Ref. No.	Part No.	Description			Remark
		< VARIABLE RESISTOR >			
RV103	1-238-076-11	RES, ADJ, CARBON 5K			
RV203	1-238-076-11	RES, ADJ, CARBON 5K			
RV205	1-230-496-11	RES, ADJ, CARBON 10K			
**********					
*	A-2007-259-A	SUB (B) BOARD, COMPLETE			
		**********			
		< CAPACITOR >			
C151	1-130-469-00	MYLAR	680PF	5%	50V
C152	1-162-282-31	CERAMIC	100PF	10%	50V
C153	1-136-157-00	FILM	0.022uF	5%	50V
C154	1-124-282-00	ELECT	22uF	20%	25V (FORMER TYPE)
C154	1-126-320-11	ELECT, NONPOLAR	10uF	20%	16V (NEW TYPE)
C161	1-137-433-11	FILM	0.0012uF	5%	50V
C162	1-107-612-11	CERAMIC	100PF	5%	500V
C163	1-136-437-11	FILM	220PF	5%	630V
C164	1-137-370-11	FILM	0.01uF	5%	50V
C165	1-137-399-11	FILM	0.1uF	5%	50V
C166	1-137-372-11	FILM	0.022uF	5%	50V
C167	1-107-297-91	MICA	75PF	5%	500V
C168	1-102-820-00	CERAMIC	330PF	5%	50V
C174	1-126-059-11	ELECT	10uF	20%	50V
C251	1-130-469-00	MYLAR	680PF	5%	50V
C252	1-162-282-31	CERAMIC	100PF	10%	50V
C253	1-136-157-00	FILM	0.022uF	5%	50V
C254	1-124-282-00	ELECT	22uF	20%	25V (FORMER TYPE)
C254	1-126-320-11	ELECT, NONPOLAR	10uF	20%	16V (NEW TYPE)
C261	1-137-433-11	FILM	0.0012uF	5%	50V
C262	1-107-612-11	CERAMIC	100PF	5%	500V
C263	1-136-437-11	FILM	220PF	5%	630V
C264	1-137-370-11	FILM	0.01uF	5%	50V
C265	1-137-399-11	FILM	0.1uF	5%	50V
C266	1-137-372-11	FILM	0.022uF	5%	50V
C267	1-107-297-91	MICA	75PF	5%	500V
C268	1-102-820-00	CERAMIC	330PF	5%	50V
C274	1-126-059-11	ELECT	10uF	20%	50V
C351	1-124-997-11	ELECT	470uF	20%	10V
C352	1-124-997-11	ELECT	470uF	20%	10V
C353	1-124-925-11	ELECT	2.2uF	20%	100V
C354	1-130-955-00	FILM	0.01uF	5%	100V
C355	1-124-925-11	ELECT	2.2uF	20%	100V
C356	1-137-438-11	FILM	0.0082uF	5%	50V
C357	1-137-366-11	FILM	0.0022uF	5%	50V
C358	1-137-366-11	FILM	0.0022uF	5%	50V
C360	1-126-933-11	ELECT	100uF	20%	16V
C361	1-126-933-11	ELECT	100uF	20%	16V
C362	1-126-964-11	ELECT	10uF	20%	50V
C363	1-124-902-00	ELECT	0.47uF	20%	50V
C364	1-107-584-11	CERAMIC	4PF	0.25PF	500V
		< CONNECTOR >			
* CN311	1-564-708-11	PIN, CONNECTOR (SMALL TYPE) 6P			
CN353	1-691-182-11	CONNECTOR (BOARD TO BOARD) 12P			
		< DIODE >			
D351	8-719-987-63	DIODE 1N4148M			
		< IC >			
IC306	8-759-602-01	IC M5220P			
IC307	8-759-106-56	IC uPC1297CA			
		< COIL >			
L161	1-410-780-11	INDUCTOR	27mH		
L261	1-410-780-11	INDUCTOR	27mH		
L351	1-414-223-11	INDUCTOR	470uH		
L352	1-414-223-11	INDUCTOR	470uH		
		< TRANSISTOR >			
Q351	8-729-900-80	TRANSISTOR	DTC114ES		
Q352	8-729-194-57	TRANSISTOR	2SC945-P		
Q353	8-729-194-57	TRANSISTOR	2SC945-P		
Q354	8-729-900-61	TRANSISTOR	DTA114ES		
		< RESISTOR >			
R151	1-259-476-11	CARBON	100K	5%	1/6W
R152	1-259-402-11	CARBON	82	5%	1/6W
R153	1-259-479-11	CARBON	130K	5%	1/6W
R154	1-259-447-11	CARBON	6.2K	5%	1/6W
R161	1-247-884-11	CARBON	160K	5%	1/4W
R162	1-249-393-11	CARBON	10	5%	1/4W
R163	1-249-431-11	CARBON	15K	5%	1/4W
R164	1-249-429-11	CARBON	10K	5%	1/4W
R165	1-259-454-11	CARBON	12K	5%	1/6W
R251	1-259-476-11	CARBON	100K	5%	1/6W
R252	1-259-402-11	CARBON	82	5%	1/6W
R253	1-259-479-11	CARBON	130K	5%	1/6W
R254	1-259-447-11	CARBON	6.2K	5%	1/6W
R261	1-247-884-11	CARBON	160K	5%	1/4W
R262	1-249-393-11	CARBON	10	5%	1/4W
R263	1-249-431-11	CARBON	15K	5%	1/4W
R264	1-249-429-11	CARBON	10K	5%	1/4W

SUB (B)

Ref.No.	Part No.	Description			Remark
R262	1-249-393-11	CARBON	10	5%	1/4W
R263	1-249-431-11	CARBON	15K	5%	1/4W
R264	1-249-429-11	CARBON	10K	5%	1/4W
R265	1-259-454-11	CARBON	12K	5%	1/6W
R351	1-249-413-11	CARBON	470	5%	1/4W
R352	1-249-413-11	CARBON	470	5%	1/4W
R353	1-249-425-11	CARBON	4.7K	5%	1/4W
R354	1-249-390-11	CARBON	5.6	5%	1/4W
R355	1-249-390-11	CARBON	5.6	5%	1/4W
R356	1-249-441-11	CARBON	100K	5%	1/4W
R357	1-249-441-11	CARBON	100K	5%	1/4W
R361	1-249-441-11	CARBON	100K	5%	1/4W
		< VARIABLE RESISTOR >			
RV101	1-230-495-11	RES, ADJ, CARBON 2.2K			
RV102	1-230-496-11	RES, ADJ, CARBON 10K			
RV201	1-230-495-11	RES, ADJ, CARBON 2.2K			
RV202	1-230-496-11	RES, ADJ, CARBON 10K			
		< RELAY >			
RY351	1-515-614-11	RELAY (REC/PB)			
		< TRANSFORMER >			
T351	1-433-366-11	TRANSFORMER, BIAS OSCILLATION			
T352	1-433-367-11	TRANSFORMER, BIAS OSSCILATION			
T353	1-433-367-11	TRANSFORMER, BIAS OSSCILATION			
		< TEST PIN >			
* TP301	1-564-518-11	PLUG, CONNECTOR 3P			
		MISCELLANEOUS			
13	1-765-645-11	WIRE (FLAT TYPE) (27 CORE)			
14	1-696-981-11	WIRE (FLAT TYPE) (5 CORE)			
53	1-590-036-11	WIRE (FLAT TYPE) (13 CORE)			
⚠66	1-575-651-21	CORD, POWER (EXCEPT UK)			
⚠66	1-769-639-11	CORD, POWER (UK)			
⚠CNJ901	1-526-794-11	OUTLET, AC			
HRPE9011	1-500-156-11	HEAD (RE/PB/ERASE)			
M901	X-3369-091-1	MOTOR ASSY (LODING)			
M902	X-3369-100-1	MOTOR (HK) ASSY (CAPSTAN/REEL)			
PM901	3-917-560-01	SOLENOID			
⚠S402	1-570-046-21	SWITCH, VOLTAGE CHANGE (SP, JE)			
S901	1-571-300-21	SWITCH, ROTARY (LOADING DET)			
⚠T501	1-426-815-11	TRANSFORMER, POWER (AEP, G, IT, UK, SP)			
⚠T501	1-426-816-11	TRANSFORMER, POWER (JE)			

Ref.No.	Part No.	Description	Remark
		ACCESSORIES & PACKING MATERIALS	
	1-558-271-11	CORD, CONNECTION (AEP, G, IT)	
	3-363-099-21	SCREW (CASE 3 TP2) (AEP, G, IT)	
	3-759-193-11	MANUAL, INSTRUCTION (ENGLISH, FRENCH, SPANISH, PORTUGUESE) (AEP)	
	3-759-193-41	MANUAL, INSTRUCTION (GERMAN, DUTCH, SWEDISH, ITALIAN) (AEP, G, IT)	
*	4-968-991-01	CUSHION (AEP, G, IT)	
*	4-968-992-81	INDIVIDUAL CARTON (AEP, G, IT)	
*	4-970-588-01	PLATE (PIN JACK 4P), INDICATION	
	X-4945-464-1	SCREW ASSY (4)	
		HARDWARE LIST	
#1	7-685-646-79	SCREW +BVTP 3X8 TYPE2 N-S	
#2	7-682-547-09	SCREW +BVTT 3X6 (S)	
#3	7-685-650-79	SCREW +BVTP 3X16 TYPE2 N-S	
#4	7-621-775-10	SCREW +B 2.6X4	
#5	7-671-113-01	STEAL, BALL 3	
#6	7-685-104-19	SCREW +P 2X6 TYPE2 NON-SLIT	
#7	7-682-544-04	SCREW +P 3X3	
#8	7-685-534-19	SCREW +BTP 2.6X8 TYPE2 N-S	

The components identified by mark ⚠ or dotted line with mark. ⚠ are critical for safety. Replace only with part number specified.

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Home A&V Products Div.

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TC-S1

SONY
SERVICE MANUAL

AEP Model
UK Model
Singapore Model
Tourist Model

CORRECTION-1

Correct your service manual as shown below.

☛ : **indicates corrected portion.**

Page	INCORRECT			CORRECT	
	No.	Part No.	Description	Part No.	Description
50	PH901	1-810-741-11	PHOTO REFLECTOR NJL5165K	8-719-710-02 ☛	PHOTO REFLECTOR NJL5165K-A ☛

(ECN-TC500865)

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Home A&V Products Company

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